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- US Pre-Grant Publication Full-Text Database
- JPO Abstracts Database
- EPO Abstracts Database
- Derwent World Patents Index
- IBM Technical Disclosure Bulletins

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Search History

Today's Date: 7/19/2001

DB Name	Query	Hit Count	Set Name
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USPT	passive near5 (immunity or immunization or antisera or antiserum)	1246	L11
USPT	l9 and l3	0	L10
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USPT	(coli or jejuni) same r2	62	L8
USPT	l3 and r2	13	L7
USPT	antibod$ or antiser$ or immune or immunoglob$ or monoclonal or polyclonal or igg or igm	71429	L6
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USPT	aflagel$ or nonflagel$ or non-flagel$ or unflagel$ or nonmotile or non-motile	604	L4
USPT	campylobact$	1062	L3
USPT	l1 and campylob$	0	L2
USPT	flge	10	L1

L17: Entry 45 of 50 File: USPT Nov 19, 1991

DOCUMENT-IDENTIFIER: US 5066596 A
TITLE: Bacterial strains harboring cloned genes controlling Vibrio cholerae O-antigen biosynthesis

BSPR:
A further aspect of this invention is that the stimulation of IgA production provides a means of measuring the immune response generated. Should the introduced genes code for a protective antigen of an invasive organism such as Campylobacter, Salmonellae or Shigella, the production of IgA antibodies directed against the introduced antigen will provide a means of measuring the generated immune response even though the IgA antibodies are not the important protective factor in these cases.

BSPR:
Other advantages of bacterial strains, constructed according to this invention and used as the active ingredient in live, oral vaccines are that a single or limited number of doses will be effective, the vaccine strain will be well characterized genetically with no theoretical possibility of reversion to virulence, and the vaccine is suitable for use in both an active and passive immunization program as the IgA antibodies produced can be passed from mother to infant in colostrum and milk.

DEPR:
It has been shown that vaccination of a sow with a purified K88 preparation can confer on her offspring passive immunity to a K88 E. coli. It could be concluded that antibodies to the K88 antigen in colostrum and milk protect the piglets by neutralization of the adhesive properties due to the K88 antigen. Thus, antibodies to the K88 adherence factor; the K88 pilus, will protect. Other adhesin type antigens designated, K99 987P, F41 have also been identified as important in piglet enteric colibacillosis. These, like the K88 adhesin could be used in the construction of a vaccine as demonstrated here fore K88 pilus antigen.

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L21: Entry 3 of 28 File: USPT Jul 11, 2000

DOCUMENT-IDENTIFIER: US 6087105 A
TITLE: Gene encoding invasion protein of campylobacter species

ABPL:
A protein associated with adherence and invasion of Campylobacter spp. including C. jejuni and C. coli is provided. Methods are disclosed for detecting Campylobacter spp. including C. jejuni and C. coli in a biological sample by determining the presence of the protein or a nucleic acid molecule encoding the protein in the sample. Compositions for treatment of infections diseases and vaccines are also described.

DEPU:
Yao, R., D. H. Burr, P. Doig, T. J. Trust, H. Niu, and P. Guerry. 1994. Isolation of motile and non-motile insertional mutants of Campyloabcter jejuni: the role of motility in adherence and invasion of eukaryotic cells. Mol. Microbiol. 14:883-893.

CLPR:
1. A purified and isolated nucleic acid molecule encoding a protein associated with adherence and invasion of Campylobacter jejuni and having a nucleic acid sequence which comprises: (a) a nucleic acid sequence as shown in SEQ ID NO:1 wherein T can also be U; or (b) nucleic acid sequences complementary to (a).

CLPR:
4. A method for preparing a Campylobacter invasion phenotype (CipA) protein associated with adherence and invasion of C. jejuni comprising culturing a host cell according to claim 3 under conditions which allow the expression of the protein and isolating the expressed protein.

WEST

Generate Collection

L23: Entry 3 of 9 File: USPT Jul 11, 2000

DOCUMENT-IDENTIFIER: US 6087105 A
TITLE: Gene encoding invasion protein of campylobacter species

BSPR:
The invention also relates to an antibody specific for one or more epitopes of a protein of the invention, preferably a monoclonal antibody and methods for preparing the antibodies. A method for detecting Campylobacter spp. as well as C. jejuni in a sample is provided comprising assaying for CipA protein in the sample. In an embodiment of the invention the method comprises contacting the sample with an antibody of the invention which is capable of being detected after it becomes bound to CipA in the sample, and measuring the amount of antibody bound to CipA in the sample, or unreacted antibody.

BSPR:
A kit for detecting Campylobacter spp. as well as Campylobacter jejuni in a sample comprising an antibody of the invention, preferably a monoclonal antibody and directions for its use is also provided. The kit may also contain reagents which are required for binding of the antibody to a CipA protein in the sample.

BSPR:
The substances identified using the method of the invention, antibodies, and antisense molecules may be used to reduce adherence and/or invasion of Campylobacter spp. including C. jejuni and accordingly may be used in the treatment of infectious diseases caused by Campylobacter spp. including C. jejuni. Accordingly, the substances may be formulated into pharmaceutical compositions for adminstration to subjects.

DEPU:
Yao, R., D. H. Burr, P. Doig, T. J. Trust, H. Niu, and P. Guerry. 1994. Isolation of motile and non-motile insertional mutants of Campyloabcter jejuni: the role of motility in adherence and invasion of eukaryotic cells. Mol. Microbiol. 14:883-893.

```
et     Items   Description
S1       279   CAMPYLOBACTER?/TI AND (NON-MOTILE OR NONMOTILE OR DEFICIEN-
              T? OR FLAGELLALESS OR (FLAGELLA (N)LESS) OR FLAGELLA-LESS?)
S2        81   RD (unique items)
S3        11   S2/2000:2001
S4        70   S2 NOT S3
?t s4/9/7 14 15 17 20 21 22 23 24 30 32 34 35 36 39 42 44 45 48 50 52 54 55 59
```

4/9/7 (Item 7 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

09590380 97386399 PMID: 9244248

The flgE gene of Campylobacter coli is under the control of the alternative sigma factor sigma54.

Kinsella N; Guerry P; Cooney J; Trust TJ

Department of Biochemistry and Microbiology, University of Victoria, British Columbia, Canada.

Journal of bacteriology (UNITED STATES) Aug 1997, 179 (15) p4647-53, ISSN 0021-9193 Journal Code: HH3

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

The flgE gene encoding the flagellar hook protein of Campylobacter coli VC167-T1 was cloned by immunoscreening of a genomic library constructed in lambdaZAP Express. The flgE DNA sequence was 2,553 bp in length and encoded a protein with a deduced molecular mass of 90,639 Da. The sequence had significant homology to the 5' and 3' sequences of the flgE genes of Helicobacter pylori, Treponema phagedenis, and Salmonella typhimurium. Primer extension analysis indicated that the VC167 flgE gene is controlled by a sigma54 promoter. PCR analysis showed that the flgE gene size and the 5' and 3' DNA sequences were conserved among C. coli and C. jejuni strains. Southern hybridization analyses confirmed that there is considerable sequence identity among the hook genes of C. coli and C. jejuni but that there are also regions within the genes which differ. Mutants of C. coli defective in hook production were generated by allele replacement. These mutants were **nonmotile** and lacked flagellar filaments. Analyses of flgE mutants indicated that the carboxy terminus of FlgE is necessary for assembly of the hook structure but not for secretion of FlgE and that, unlike salmonellae, the lack of flgE expression does not result in repression of flagellin expression.

Tags: Animal; Support, Non-U.S. Gov't; Support, U.S. Gov't, Non-P.H.S.

Descriptors: *Bacterial Proteins--genetics--GE; *Campylobacter coli --genetics--GE; *DNA-Directed RNA Polymerase--physiology--PH; *Flagella; *Gene Expression Regulation, Bacterial; *Sigma Factor--physiology--PH; Amino Acid Sequence; Base Sequence; Cloning, Molecular; DNA, Bacterial; Flagellin; Genes, Bacterial; Molecular Sequence Data; Mutagenesis, Site-Directed; Promoter Regions (Genetics); Rabbits; Sequence Homology, Amino Acid

Molecular Sequence Databank No.: GENBANK/AF004221

CAS Registry No.: 0 (Bacterial Proteins); 0 (DNA, Bacterial); 0 (FlgE protein); 0 (Sigma Factor); 12777-81-0 (Flagellin); 135114-79-3 (RpoN protein)

Enzyme No.: EC 2.7.7.6 (DNA-Directed RNA Polymerase)

Record Date Created: 19971023

4/9/14 (Item 14 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

08216953 94341897 PMID: 8063406

Differential flagellin expression in a flaA flaB+ mutant of Campylobacter jejuni.

Wassenaar TM; Bleumink-Pluym NM; Newell DG; Nuijten PJ; van der Zeijst BA

Department of Bacteriology, School of Veterinary Medicine, University of

Utrecht, The Netherlands.
Infection and immunity (UNITED STATES) Sep 1994, 62 (9) p3901-6,
ISSN 0019-9567 Journal Code: GO7
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS

Campylobacter jejuni 81116 has two genes coding for flagellin, flaA and flaB. Fully motile wild-type C. jejuni bacteria express the flaA gene, with no flaB message being detected. A **nonmotile** flaA flaB+ mutant, R1, produced detectable levels of flagellin B which was incorporated into truncated flagella. After R1 had invaded INT-407 cells, a variant with increased motility, R1-V2, was isolated. R1-V2 produced full-length flagella and an increased amount of flagellin B. Transcriptional analysis showed that R1-V2 contained more flaB mRNA than its parental strain, R1. The flaB gene promoter sequence and primer extension experiments confirmed that transcription of the flaB gene is initiated from a sigma 54 promoter. Neither the promoter sequence nor the coding sequence of flaB had changed in R1-V2. In contrast to R1, R1-V2 no longer produced (truncated) flaA mRNA. The sigma 28 flaA promoter sequence was not changed in R1-V2. We propose that expression of the two flagellin genes in C. jejuni 81116 is regulated at the transcriptional level, in such a way that predominantly one gene at a time is transcribed. We compared the levels of invasiveness of the wild-type strain, R1, and R1-V2 for INT-407 cells. The shift in expression from flaA to flaB occurred not only during invasion assays but also under different conditions in the absence of eukaryotic cells.

Tags: Support, Non-U.S. Gov't
Descriptors: *Bacterial Proteins--genetics--GE; *Campylobacter jejuni --genetics--GE; *Flagellin--genetics--GE; *Gene Expression Regulation, Bacterial; Base Sequence; Campylobacter jejuni--pathogenicity--PY; Flagellin--analysis--AN; Molecular Sequence Data; Mutation; Promoter Regions (Genetics); RNA, Messenger--analysis--AN
CAS Registry No.: 0 (Bacterial Proteins); 0 (RNA, Messenger); 12777-81-0 (Flagellin); 133606-66-3 (flaA protein); 140470-87-7 (flaB protein)
Record Date Created: 19940921

4/9/15 (Item 15 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08216944 94341881 PMID: 8063393
Cell association and invasion of Caco-2 cells by Campylobacter **jejuni.**
Russell RG; Blake DC
Department of Pathology, School of Medicine, University of Maryland at Baltimore 21201.
Infection and immunity (UNITED STATES) Sep 1994, 62 (9) p3773-9,
ISSN 0019-9567 Journal Code: GO7
Contract/Grant No.: RR03123, RR, NCRR
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS

Adherence and invasion studies were conducted in monolayers of Caco-2 cells. Three-day-old monolayers were inoculated with Campylobacter jejuni 81-176 at a bacterium/cell ratio of 1,000:1. Saturation studies demonstrated time- and dose-dependent saturation curves for C. jejuni cell association and invasion into Caco-2 cells. Electron microscopy revealed intracellular C. jejuni located within membrane-bound vacuoles. Cell association and invasion were inhibited by 0.3 and 0.5 M concentrations of various sugars, including D-glucose, D-mannose, and D-fucose. However, there was no inhibition with the corresponding L-sugars, indicating physiological specificity. The inhibition of cell association with phloridzin was less pronounced. There was no inhibition of bacterial entry with monodansylcadaverine or g-strophanthin, indicating that it was unlikely that coated-pit formation is important in the invasion of C.

#15

jejuni into Caco-2 cells. Furthermore, there was no inhibition with cytochalasin D, vincristine, or vinblastine. Inhibition of cell association was demonstrated at 4 degrees C. Significantly decreased cell association and invasion were seen in potassium-depleted cells. Treatment of cells with bromelain also caused reduction in the number of C. jejuni binding to cells. A **nonmotile** aflagellate variant of C. jejuni also showed reduced invasion. The results of this study are consistent with energy-dependent invasion mechanisms. The results do not support an endocytic method of invasion for C. jejuni into Caco-2 cells.

Tags: Human; Support, U.S. Gov't, P.H.S.

Descriptors: *Campylobacter jejuni--pathogenicity--PY; *Colon --microbiology--MI; Chloramphenicol--pharmacology--PD; Phlorhizin--pharmacology--PD; Tumor Cells, Cultured; Vincristine--pharmacology--PD

CAS Registry No.: 56-75-7 (Chloramphenicol); 57-22-7 (Vincristine); 60-81-1 (Phlorhizin)

Record Date Created: 19940921

4/9/17 (Item 17 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

08167732 94260712 PMID: 8201772

The role of flagella of Campylobacter **jejuni in colonization in the intestinal tract in mice and the cultured-cell infectivity]**

Yanagawa Y; Takahashi M; Itoh T

Tokyo Metropolitan Research Laboratory of Public Health.

Nippon saikingaku zasshi (JAPAN) Mar 1994, 49 (2) p395-403, ISSN 0021-4930 Journal Code: KHZ

Languages: JAPANESE

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

For analyzing the role of the bacterial flagella in colonization in the intestinal tract of mice and adhering to or invading the Intestine 407 cell, a nonflagellated, **nonmotile** mutant was induced by ultraviolet irradiation of a flagellated, motile wild-type strain of Campylobacter jejuni CF84-340. There was no great difference in the cellular infectivity to the Intestine 407 cells between the wild-type and the mutant strains. Cellular adherence and invasiveness were then compared by fluorescent antibody staining, and an obvious difference was found in the latter. While 21.4% of the organisms of the wied-type strain invaded the cells, only 6.1% of those of the flagella-defective mutant did so. In the experiments in mice involving oral administration, cellular invasiveness was not found with the flagella-defective mutant and no organisms were detected from the blood, although bacteremia is one of the characteristics of infection with C. jejuni. Moreover, no intestinal adherence of the mutant was detected, suggesting early elimination of the organism administered. These results indicate that the bacterial flagella are concerned in not only the cellular adherence and intestinal deposit, but also the intracellular invasiveness and invasion into the blood stream from the intestinal wall in the infected mice.

Tags: Animal; Human

Descriptors: *Campylobacter jejuni--growth and development--GD; *Flagella --physiology--PH; *Intestines--microbiology--MI; Bacterial Adhesion; Campylobacter jejuni--physiology--PH; Cells, Cultured; Intestines--cytology --CY; Mice; Mutation

Record Date Created: 19940701

4/9/20 (Item 20 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

07882082 93239276 PMID: 8478066

Role of flagella in adherence, internalization, and translocation of Campylobacter **jejuni in nonpolarized and polarized epithelial cell**

cultures.
Grant CC; Konkel ME; Cieplak W; Tompkins LS
Department of Microbiology and Immunology, Stanford University Medical Center, California 94305.
Infection and immunity (UNITED STATES) May 1993, 61 (5) p1764-71, ISSN 0019-9567 Journal Code: GO7
Contract/Grant No.: AI23796-07, AI, NIAID
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS
Previous studies of Campylobacter jejuni have suggested that flagellin is an adhesin for epithelial cells and that motility is a virulence factor of this bacterium. The role of flagella in the interactions of C. jejuni with nonpolarized and polarized epithelial cells was examined with flagellar mutants. Flagellated, **nonmotile** (flaA flaB+ Mot-) and nonflagellated, **nonmotile** (flaA flaB Mot-) mutants of C. jejuni were constructed by in vivo homologous recombination and gene replacement techniques. Both classes of mutants were found to adhere to cells of human epithelial origin (INT 407) equally well; however, on the basis of the percentage of the inoculum internalized, internalization of the flaA flaB Mot- mutants was decreased by factors ranging from approximately 30 to 40 compared with the parent. The flaA flaB+ Mot- mutant was internalized by the INT 407 cells at levels six- to sevenfold higher than the flaA flaB Mot- mutants. Both classes of mutants, unlike the parent, were unable to translocate across polarized Caco-2 monolayers. These results indicate that flagella are not involved in C. jejuni adherence to epithelial cells but that they do play a role in internalization. Furthermore, the results suggest that either the motility of C. jejuni or the product of flaA is essential for the bacterium to cross polarized epithelial cell monolayers.
Tags: In Vitro; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.
Descriptors: *Bacterial Adhesion; *Campylobacter jejuni--pathogenicity --PY; *Flagellin--genetics--GE; *Intestines--microbiology--MI; Base Sequence; Campylobacter jejuni--genetics--GE; Cell Polarity; Cells, Cultured; Cloning, Molecular; DNA Mutational Analysis; DNA, Bacterial --genetics--GE; Endocytosis; Epithelium--microbiology--MI; Flagellin --metabolism--ME; Molecular Sequence Data; Oligodeoxyribonucleotides --chemistry--CH; Restriction Mapping
CAS Registry No.: 0 (DNA, Bacterial); 0 (Oligodeoxyribonucleotides); 12777-81-0 (Flagellin)
Gene Symbol: ist/GeneSymbol flaA
Record Date Created: 19930524

4/9/21 (Item 21 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07727557 93342950 PMID: 1307436
Colonization of infant mice with flagellar variants of Campylobacter **jejuni.**
Diker KS; Hascelik G; Diker S
Department of Microbiology, Faculty of Veterinary Medicine, Ankara University, Turkey.
Acta microbiologica Hungarica (HUNGARY) 1992, 39 (2) p133-6, ISSN 0231-4622 Journal Code: 1AH
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS
The role of flagella in the colonization of the intestine by Campylobacter jejuni was investigated by challenging infant mice with two flagellated strains and their nonflagellated variants. The intestinal tracts of infant mice were regularly colonized with motile strains, but not by **nonmotile** variants. Colonization of mice with motile C. jejuni occurred with as few as 1000 bacteria per mouse.
Tags: Animal

The campylobacters are now regarded as one of the principal causes of bacterial intestinal tract infections, with an incidence quite similar those due to Salmonella. It is a mainly pediatric infection, which affects mostly boys (60%), the infant less than 1 year of age (25% of cases) and is usually sporadic. C. jejuni (75%) or C. coli (16%) are the most commonly involved; a higher incidence of septicemia is noted with the other more rarely isolated species. Clinical signs are mostly of digestive origin, represented principally by diarrhoea in almost all cases, associated to severe abdominal pain in the child and bloody stools especially in infants in half of cases. Infection is usually mild with a benign course lasting one week. Systemic infection or visceral involvement are rare, occuring mostly in neonates or immuno-**deficient** patients. C. jejuni can be responsible for Guillain-Barre Syndrome or hemolytic uremic syndrome. Macrolids, the most commonly used antibiotics, are rarely indicated.

MEDICAL DESCRIPTORS:
*campylobacter coli; *campylobacter jejuni; *intestine infection
--epidemiology--ep; *intestine infection--diagnosis--di
adolescent; age; antibiotic sensitivity; bacterium isolation; blood culture
; child; clinical feature; conference paper; disease course; feces culture;
human; immune deficiency; incidence; infant; sex difference
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
007 Pediatrics and Pediatric Surgery
048 Gastroenterology

4/9/50 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE

02254854 EMBASE No: 1982048015
Wolinella gen. nov., Wolinella succinogenes (Vibrio succinogenes Wolin et al.) comb. nov., and description of Bacteroides gracilis sp. nov., Wolinella recta sp. nov., Campylobacter concisus sp. nov., and Eikenella corrodens from humans with periodontal disease
Tanner A.C.; Badger S.; Lai C.H.; et al.
Forsyth Dent. Cent., Boston, MA 02115 United States
International Journal of Systematic Bacteriology (INT. J. SYST. BACTERIOL.) (United States) 1981, 31/4 (432-445)
CODEN: IJSBA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

The authors compared 46 strains of gram-negative, asaccharolytic, rod-shaped bacteria which were isolated from humans with gingivitis, periodontal pockets, and lesions in alveolar bone with 10 reference strains of Eikenella corrodens, Vibrio succinogenes, Bacteroides ureolyticus, and species of Campylobacter. They divided these 56 strains into seven groups based on the guanine-plus-cytosine contents of their deoxyribonucleic acids, their deoxyribonucleic acid homologies, and cluster analyses of their phenotypic features. A total of 23 of the fresh isolates showed more than 90% similarity (Jaccard coefficient) with E. corrodens. Growth of the remaining 23 isolates was enhanced in broth cultures by formate and fumarate. These isolates were not members of B. ureolyticus, V. succinogenes, or previously described species of Campylobacter; they constituted 3 distinct new species. They propose Bacteroides gracilis sp. nov. (type strain, ATCC 33236) as the name for 7 isolates of slender, gram-negative, **nonmotile** , anaerobic, rod-shaped bacteria that corroded agar and had deoxyribonucleic acid guanine-plus-cytosine contents of 44 to 46 mol%. All of the remaining isolates were motile by means of a single polar flagellum. Ten anaerobic strains were similar to V. succinogenes in phenotypic characteristics and guanine-plus-cytosine contents. However, these strains were distinct from V. succinogenes on the basis of deoxyribonucleic acid homology results. They propose Wolinella as the name of a new genus to include anaerobic, asaccharolytic, rod-shaped bacteria

Western blot analysis of intestinal secretory immunoglobulin A response to Campylobacter jejuni antigens in patients with naturally acquired Campylobacter enteritis.

Winsor DK; Mathewson JJ; DuPont HL

Gastroenterology (UNITED STATES) May 1986, 90 (5 Pt 1) p1217-22, ISSN 0016-5085 Journal Code: FH3

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: AIM; INDEX MEDICUS

Secretory immunoglobulin A (sIgA) response at the intestinal mucosa is a primary defense against enteric infections. We sought to determine which antigens of Campylobacter jejuni outer membranes elicited sIgA responses in 8 patients with naturally acquired Campylobacter enteritis using Western blot analysis of fecal extracts. Naturally acquired Campylobacter infection elicited an sIgA response in 7 of 8 patients. Of these 7 patients, 5 had Campylobacter-specific sIgA titers of 1:16 and two had titers of 1:64. The C. jejuni antigens eliciting sIgA production varied, but 5 of 8 patients exhibited reactions to a 63-kilodalton flagellar antigen, and 7 of 8 patients had a reaction with a 58- and a 44-kilodalton antigen of C. **jejuni** and Campylobacter coli. Reaction with a 14.5- and a **97 - kilodalton** antigen was observed with the only stool that contained gross blood and mucus. Reactions with Campylobacter antigens were not detected in the fecal extracts of 5 healthy individuals. Identification of the antigens of C. jejuni that elicit an sIgA response may help us to better understand the immunology of Campylobacter enteritis and to identify antigens that are important in vaccine development.

14006 Digestive System-Pathology
22002 Pharmacology-General
22501 Toxicology-General; Methods and Experimental
25000 Pediatrics
31000 Physiology and Biochemistry of Bacteria
36002 Medical and Clinical Microbiology-Bacteriology
37052 Public Health: Epidemiology-Communicable Diseases
38504 Chemotherapy-Antibacterial Agents
10060 Biochemical Studies-General
10068 Biochemical Studies-Carbohydrates
32000 Microbiological Apparatus, Methods and Media
34502 Immunology and Immunochemistry-General; Methods
37400 Public Health: Microbiology
BIOSYSTEMATIC CODES:
04610 Spirillaceae (1979-)
86215 Hominidae
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA):
Microorganisms
Bacteria
Animals
Chordates
Vertebrates
Mammals
Primates
Humans

6/9/15 (Item 2 from file: 144)
DIALOG(R)File 144:Pascal

11586341 PASCAL No.: 94-0472432
Concentration of campylobacter-**specific antibodies in the colostrum of immunized cows**
SYVAEOJA E L; AHOLA-LUTTILA H K; KALSTA H; MATILAINEN M H; LAAKSO S; HUSU J R; KOSUNEN T U
Valio Ltd, res. development cent., 00101 Helsinki, Finland
Journal: Milchwissenschaft, 1994, 49 (1) 27-31
ISSN: 0026-3788 CODEN: MILCAD Availability: INIST-4873; 354000024820330070
No. of Refs.: 24 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: Federal Republic of Germany
Language: English Summary Language: German

English Descriptors: Milk; Cow; Colostrum; Antibody; Specificity; Campylobacter jejuni; **Passive immunity**
Broad Descriptors: Ox; Artiodactyla; Ungulata; Mammalia; Vertebrata; Campylobacteraceae; Bacteria; Boeuf; Artiodactyla; Ungulata; Mammalia; Vertebrata; Campylobacteraceae; Bacterie; Buey; Artiodactyla; Ungulata; Mammalia; Vertebrata; Campylobacteraceae; Bacteria
French Descriptors: Lait; Vache; Colostrum; Anticorps; Specificite; Campylobacter jejuni; **Immunite passive**

Classification Codes: 002A36C03

6/9/16 (Item 3 from file: 144)
DIALOG(R)File 144:Pascal

11096042 PASCAL No.: 93-0603063
Production of hyperimmune bovine colostrum against Campylobacter **jejuni**
HUSU J; SYVAEOJA E L; AHOLA-LUTTILA H; KALSTA H; SIVELAE S; KOSUNEN T U
Univ. Helsinki, national veterinary inst., dep. bacteriology serology, 00101 Helsinki, Finland

Journal: Journal of applied bacteriology, 1993, 74 (5) 564-569
ISSN: 0021-8847 CODEN: JABAA4 Availability: INIST-7415;
354000037282930090
No. of Refs.: 1 p.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: United Kingdom
Language: English

Serial immunization of dairy cows with Campylobacter jejuni resulted in an enhanced serum antibody response and production of hyperimmune colostrum in all vaccinated animals. An approximate 10-fold decrease in the Camp. jejuni-specific antibody titres in colostrum was observed within 2 d post-partum. The lyophilized colostral concentrate fed to newborn calves resulted in a rapid increase in serum antibody response. Specific Camp. jejuni immunoglobulins could be detected in these animals for a further 10 weeks. The lyophilized hyperimmunized colostrum was very stable in vitro at different storage temperatures. It could be used for **passive immunization** to campylobacteriosis.

English Descriptors: Bovine; Immunization; Campylobacter jejuni; Immune response; Humoral immunity; Antibody; Serum; Colostrum; Hyperimmunization ; Vaccine; Newborn animal; Immunoglobulins
Broad Descriptors: Artiodactyla; Ungulata; Mammalia; Vertebrata; Spirillaceae; Spirillales; Bacteria; Artiodactyla; Ungulata; Mammalia; Vertebrata; Spirillaceae; Spirillales; Bacterie; Artiodactyla; Ungulata; Mammalia; Vertebrata; Spirillaceae; Spirillales; Bacteria

French Descriptors: Bovin; Immunisation; Campylobacter jejuni; Reponse immune; Immunite humorale; Anticorps; Serum; Colostrum; Hyperimmunisation ; Vaccin; Animal nouveau ne; Immunoglobuline

Classification Codes: 002A05B12

6/9/19 (Item 6 from file: 144)
DIALOG(R)File 144:Pascal

08166276 PASCAL No.: 88-0166622
The mechanism of protection of infant mice from intestinal colonisation with Campylobacter **jejuni**
ABIMIKU A G; DOLBY J M
MRC clin. res. cent., div. communicable diseases, Harrow Middx. MA1 3UJ, United Kingdom
Journal: Journal of medical Microbiology, 1987, 23 (4) 339-344
ISSN: 0022-2615 CODEN: JMMIAV Availability: CNRS-988B
No. of Refs.: 19 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: United Kingdom
Language: ENGLISH

English Descriptors: Campylobacter jejuni; Mouse; Vaccine; Inactivated strain; Immunoprotection; Milk; Colostrum; Milk transfer; Antibody; IgG; IgA; Vaccination; Mother; **Passive immunization** ; Progeny; Experimental animal
Broad Descriptors: Spirillaceae; Spirillales; Bacteria; Rodentia; Mammalia; Vertebrata; Spirillaceae; Spirillales; Bacterie; Rodentia; Mammalia; Vertebrata; Spirillaceae; Spirillales; Bacteria; Rodentia; Mammalia; Vertebrata
French Descriptors: Campylobacter jejuni; Souris; Vaccin; Souche inactivee; Immunoprotection; Lait; Colostrum; Passage lait; Anticorps; IgG; IgA; Vaccination; Mere; **Immunisation passive** ; Descendance; Animal experience

Classification Codes: 002A05B12

6/9/20 (Item 7 from file: 144)
DIALOG(R)File 144:Pascal

07515080 PASCAL No.: 87-0016648
The protection of infant mice from colonization with Campylobacter **jejuni by vaccination of the dams**
DOLBY J M; NEWELL D G
Clin. res. cent., Harrow HA1 3UJ, United Kingdom
Journal: Journal of Hygiene, 1986, 96 (2) 143-151
ISSN: 0022-1724 Availability: CNRS-6056
No. of Refs.: 25 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: United Kingdom
Language: English

English Descriptors: Campylobacter jejuni; Flagellum; Vaccination; Mouse; Mother; Immunoprotection; Newborn animal; Animal model; Active immunization; Specificity; Variant; Campylobacter infection; Experimental disease; **Passive immunity** ; Vaccine strain; Inactivated strain
Broad Descriptors: Spirillaceae; Spirillales; Bacteria; Rodentia; Mammalia; Vertebrata; Bacteriosis; Infection; Spirillaceae; Spirillales; Bacterie; Rodentia; Mammalia; Vertebrata; Bacteriose; Infection; Bacteria; Bacteriosis; Infeccion
French Descriptors: Campylobacter jejuni; Flagelle; Vaccination; Souris; Mere; Immunoprotection; Animal nouveau ne; Modele animal; Immunisation active; Specificite; Variant; Campylobacteriose; Pathologie experimentale ; **Immunite passive** ; Souche vaccinale; Souche inactivee

Classification Codes: 002A05B12

6/9/22 (Item 9 from file: 144)
DIALOG(R)File 144:Pascal

02307538 PASCAL No.: 79-0314610
EFFECTS OF PASSIVELY AND ACTIVELY ACQUIRED ANTIBODY ON BOVINE CAMPYLOBACTERIOSIS **(VIBRIOSIS)**
BERG R L; FIREHAMMER B D; BORDER M; MYERS L L
MONTANA STATE UNIV. VET. RES. LAB., BOZEMAN MT 59717,USA
Journal: AMER. J. VETER. RES., 1979, 40 (1) 21-31
Availability: CNRS-4164
No. of Refs.: 26 REF.
Document Type: P (SERIAL) ; A (ANALYTIC)
Country of Publication: USA
Language: ENGLISH

English Descriptors: EXPERIMENTAL ANIMAL; ANTIBODY; BACTERIOSIS; BOVINE; CAMPYLOBACTER FETUS; CAMPYLOBACTER INFECTION; ACTIVE **IMMUNIZATION** ; **PASSIVE IMMUNIZATION** ; IMMUNOPROTECTION; INFECTION; MAMMALIA; EXPERIMENTAL DISEASE; PREVENTION; RODENTIA; VACCINATION
English Generic Descriptors: MICROBIOLOGY

French Descriptors: CAMPYLOBACTERIOSE; **IMMUNISATION PASSIVE** ; **IMMUNISATION** ACTIVE; ANTICORPS; BOVIN; VACCINATION; CAMPYLOBACTER FETUS; PATHOLOGIE EXPERIMENTALE; IMMUNOPROTECTION; PREVENTION; ANIMAL EXPERIENCE ; MAMMALIA; RODENTIA; BACTERIOSE; INFECTION
French Generic Descriptors: MICROBIOLOGIE

Classification Codes: 340A08A11

6/9/23 (Item 1 from file: 155)

IgM--immunology--IM; Immunization; Mice; Mice, Inbred Strains; Peripheral Nerves--immunology--IM
CAS Registry No.: 0 (Antibodies, Monoclonal); 0 (Complement 3); 0 (Gangliosides); 0 (IgM); 0 (Lipopolysaccharides)
Record Date Created: 19991013

6/9/25 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09332089 97325879 PMID: 9182891
Oral administration of antibodies as prophylaxis and therapy in Campylobacter **jejuni-infected chickens.**
Tsubokura K; Berndtson E; Bogstedt A; Kaijser B; Kim M; Ozeki M; Hammarstrom L
Department of Clinical Immunology, Huddinge Hospital, Sweden.
Clinical and experimental immunology (ENGLAND) Jun 1997, 108 (3) p451-5, ISSN 0009-9104 Journal Code: DD7
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS
Passive immunity against gastrointestinal infections has recently been successfully applied as prophylaxis and therapy in patients in a variety of virally and bacterially induced infections. Campylobacter jejuni is frequently associated with acute diarrhoea in humans, and several species of animals have been shown to transmit the disease, although birds have been implicated as the main source of infection. We used bovine and chicken immunoglobulin preparations from the milk and eggs, respectively, of immunized animals for prophylactic and therapeutic treatment of chickens infected with C. jejuni. A marked prophylactic effect (a >99% decrease in the number of bacteria) was noted using either antibody preparation, whereas the therapeutic efficacy, i.e. when antibodies were given after the infection was established, was distinctly lower (80-95%) as judged by faecal bacterial counts. These observations may serve as a starting point for experiments aimed at elimination of the infection in an industrial or farm setting. It may also encourage future attempts to treat, prophylactically or therapeutically, patients with Campylobacter-induced diarrhoea.
Tags: Animal; Female; Support, Non-U.S. Gov't
Descriptors: *Antibodies, Bacterial--therapeutic use--TU; *Campylobacter Infections--prevention and control--PC; *Campylobacter jejuni--immunology --IM; Administration, Oral; Campylobacter Infections--therapy--TH; Cattle; Chickens; **Immunization , Passive**
CAS Registry No.: 0 (Antibodies, Bacterial)
Record Date Created: 19970626

6/9/26 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08254807 95014937 PMID: 7929763
Persistence of Campylobacter **fetus bacteremia associated with absence of opsonizing antibodies.**
Neuzil KM; Wang E; Haas DW; Blaser MJ
Division of Infectious Diseases, Vanderbilt University School of Medicine, Nashville, Tennessee 37232.
Journal of clinical microbiology (UNITED STATES) Jul 1994, 32 (7) p1718-20, ISSN 0095-1137 Journal Code: HSH
Contract/Grant No.: GM07569, GM, NIGMS; RO1 AI 24145, AI, NIAID
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS
Campylobacter fetus causes systemic infections in immunocompromised

hosts. We describe a case in which C. fetus bacteremia apparently relapsed after 7 years in a patient with hypogammaglobulinemia and characterize the serum resistance of the patient's C. fetus strain and the inability of the patient's serum, with and without commercial intravenous immunoglobulin, to opsonize this and another C. fetus strain effectively. The probable presence of a sequestered site of infection in bone, the intrinsic serum resistance of the C. fetus strain, and the absence of specific antibody may account for the persistent infection in this patient. These studies suggest that intravenous immunoglobulin treatment is not useful in eradicating C. fetus bacteremia.

Tags: Case Report; Human; Male; Support, U.S. Gov't, P.H.S.

Descriptors: *Agammaglobulinemia--complications--CO; *Antibodies, Bacterial--immunology--IM; *Bacteremia--immunology--IM; *Campylobacter fetus--immunology--IM; Bacteremia--etiology--ET; Bacteremia--therapy--TH; Blood Bactericidal Activity; **Immunization , Passive** ; Middle Age; Opsonins--immunology--IM; Recurrence; Treatment Failure

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Opsonins)

Record Date Created: 19941121

6/9/27 (Item 5 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

08021407 93225686 PMID: 8096934

Oral immunoglobulin treatment in Campylobacter **jejuni enteritis.**

Heaton P

Lancet (ENGLAND) Apr 17 1993, 341 (8851) p1036, ISSN 0140-6736 Journal Code: L0S

Comment on Lancet. 1993 Mar 13;341(8846) 701-2

Languages: ENGLISH

Document type: Comment; Letter

Record type: Completed

Subfile: AIM; INDEX MEDICUS

Tags: Animal; Human; Male

Descriptors: Colostrum--immunology--IM; *Cryptosporidiosis--therapy--TH; * **Immunization , Passive** --methods--MT; *Intestinal Diseases--therapy--TH ; Cattle; Child

Record Date Created: 19930511

6/9/29 (Item 7 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

07281259 91054093 PMID: 2241686

Influence of antibody treatment of Campylobacter **jejuni on the dose required to colonize chicks.**

Stern NJ; Meinersmann RJ; Dickerson HW

Poultry Microbiological Safety Research Unit, Richard B. Russell Agricultural Research Center, USDA-Agricultural Research Service, Athens, Georgia 30613.

Avian diseases (UNITED STATES) Jul-Sep 1990, 34 (3) p595-601, ISSN 0005-2086 Journal Code: 9IY

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

This study was designed to clarify the role of antibodies in controlling chicken colonization by Campylobacter jejuni. Cecal colonization by C. jejuni was compared after the organism was exposed either to phosphate-buffered saline, normal rabbit serum, rabbit hyperimmune anti-C. jejuni serum, or anti-C. jejuni antibodies extracted from chicken bile. Antibodies from chicken bile were extracted by affinity absorption against outer-membrane proteins from the challenge organism. Sera were heated 1 hour at 56 C to destroy complement activity. Bacterial inoculum levels were enumerated after 1 hour exposure at 4 C to the various treatments. The

heated sera and the bile antibodies were not bactericidal, and bacterial agglutination was not evident. Serial dilutions of the antibody-treated C. jejuni were given by gavage into 1-day-old chicks. Six days later, the ceca were removed from the chicks, and samples were cultured on Campylobacter-charcoal differential agar. The colonization dose-50% was increased by twofold to 160-fold when the organism was preincubated with hyperimmune antiserum or the bile antibodies as compared with preincubation with phosphate-buffered saline. We conclude that antibodies inhibit chicken cecal colonization by C. jejuni.

Tags: Animal; Support, Non-U.S. Gov't; Support, U.S. Gov't, Non-P.H.S.

Descriptors: Campylobacter Infections--veterinary--VE; *Campylobacter jejuni--immunology--IM; *Chickens; * **Immunization , Passive** ; *Poultry Diseases--immunology--IM; Bile--immunology--IM; Campylobacter Infections --immunology--IM; Campylobacter jejuni--growth and development--GD; Carrier State--immunology--IM; Carrier State--veterinary--VE; Cecum--microbiology --MI; Colony Count, Microbial; Dose-Response Relationship, Immunologic; Enzyme-Linked Immunosorbent Assay; IgA, Secretory--immunology--IM; IgA, Secretory--isolation and purification--IP; Immune Sera--immunology--IM

CAS Registry No.: 0 (IgA, Secretory); 0 (Immune Sera)

Record Date Created: 19901207

6/9/30 (Item 8 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

07104296 94139766 PMID: 8307048

Use of an immunoglobulin M containing preparation for treatment of two hypogammaglobulinemic patients with persistent Campylobacter **jejuni infection.**

Borleffs JC; Schellekens JF; Brouwer E; Rozenberg-Arska M

Department of Internal Medicine, University Hospital Utrecht, The Netherlands.

European journal of clinical microbiology & infectious diseases (GERMANY) Oct 1993, 12 (10) p772-5, ISSN 0934-9723 Journal Code: EM5

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

This report describes two hypogammaglobulinemic patients with persistent Campylobacter jejuni infections in spite of IgG substitution and antibiotic therapy. Since serum bactericidal activity (SBA) depends on IgM, these patients were each treated with six doses of an IgM-containing immunoglobulin preparation (Pentaglobin) at three-week intervals. During IgG therapy SBA was not seen in either patient. However, one hour following administration of the IgM preparation, SBA increased to 90%. Just before the next dose SBA was still at the 30-70% level. Both patients tolerated the therapy very well and there were no culture-confirmed relapses of Campylobacter jejuni infection. The IgM preparation may therefore be a useful alternative to conventional IgG in the treatment of hypogammaglobulinemic patients with persistent Campylobacter jejuni infection.

Tags: Human

Descriptors: Agammaglobulinemia--therapy--TH; *Campylobacter Infections --therapy--TH; *Campylobacter jejuni; *IgM--therapeutic use--TU; * **Immunization , Passive** ; Adult; Agammaglobulinemia--genetics--GE; Blood Bactericidal Activity; Campylobacter Infections--immunology--IM

CAS Registry No.: 0 (IgM)

Record Date Created: 19940311

6/9/31 (Item 9 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

07026144 93132387 PMID: 8421171

Pathogenesis of Campylobacter **fetus infections: critical role of**

high-molecular-weight S-layer proteins in virulence.
Blaser MJ; Pei Z
Department of Medicine, Vanderbilt University School of Medicine, Nashville, TN 37232-2605.
Journal of infectious diseases (UNITED STATES) Feb 1993, 167 (2) p372-7, ISSN 0022-1899 Journal Code: IH3
Contract/Grant No.: AI-24145, AI, NIAID
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: AIM; INDEX MEDICUS
Wild-type Campylobacter fetus strains possess high-molecular-weight S-layer proteins (S+) and are highly resistant to serum-mediated killing and phagocytosis. Spontaneous mutant strains lacking these proteins (S-) are serum and phagocytosis sensitive and have reduced virulence in a mouse model. Intact S+ cells were treated with pronase, which made them S- although genotypically S+ and had essentially no effect on other cellular proteins or on viability. Treatment with pronase, but not buffer alone, rendered these cells serum and phagocytosis sensitive and reduced mouse virulence to the level observed for the S- mutant cells. In related studies, purified S-layer proteins diminished neutrophil chemoluminescent responses to a heterologous particulate antigen. Finally, passive administration of antiserum to the 97-kDa S-layer protein partially protected mice against lethal challenge with the S+ strain. These studies define the contribution of the S-layer proteins to C. fetus virulence.
Tags: Animal; Support, U.S. Gov't, Non-P.H.S.; Support, U.S. Gov't, P.H.S.
Descriptors: *Bacterial Proteins--immunology--IM; *Campylobacter Infections--microbiology--MI; *Campylobacter fetus--pathogenicity--PY; Antigens, Bacterial--physiology--PH; Blood Bactericidal Activity; Campylobacter Infections--immunology--IM; Campylobacter fetus--immunology --IM; Campylobacter fetus--metabolism--ME; Chemiluminescence; **Immunization , Passive** ; Mice; Phagocytosis; Pronase--metabolism--ME; Virulence
CAS Registry No.: 0 (Antigens, Bacterial); 0 (Bacterial Proteins); 0 (streptococcal cell surface antigen I-II)
Enzyme No.: EC 3.4.24.- (Pronase)
Record Date Created: 19930212

6/9/33 (Item 11 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

02741677 79207550 PMID: 88198
Effects of passively and actively acquired antibody on bovine campylobacteriosis **(vibriosis)**.
Berg RL; Firehammer BD; Border M; Myers LL
American journal of veterinary research (UNITED STATES) Jan 1979, 40 (1) p21-5, ISSN 0002-9645 Journal Code: 40C
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Animal; Female
Descriptors: *Campylobacter Infections--veterinary--VE; *Cattle Diseases --prevention and control--PC; *Immunity, Active; *Immunity, Maternally-Acquired; Antibodies, Bacterial--analysis--AN; Campylobacter Infections--immunology--IM; Campylobacter Infections --prevention and control--PC; Campylobacter fetus--immunology--IM; Cattle; Cattle Diseases --immunology--IM; Gamma-Globulins--administration and dosage--AD; **Immunization , Passive** ; Vaccination--veterinary--VE
CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Gamma-Globulins)
Record Date Created: 19790901

6/9/35 (Item 2 from file: 53)

DIALOG(R)File 53:FOODLINE(R): Food Science & Technology

00296239 FOODLINE ACCESSION NUMBER: 311018
Production of hyperimmune bovine colostrum against Campylobacter **jejuni.**
Husu J; Syvaoja E -L; Ahola-Luttila H; Kalsta H; Sivela S; Kosunen T U
Journal of Applied Bacteriology 74 (5), 564-569 (32 ref.)
1993
LANGUAGE: English
DOCUMENT TYPE: Journal article
FOODLINE UPDATE CODE: 19930521
ABSTRACT: Campylobacter jejuni is a major foodborne human enteric pathogen. The mechanisms responsible for immunity against C. jejuni are not clear. Serial immunisation of dairy cows with C. jejuni enhanced the serum antibody response and production of hyperimmune colostrum. The lyophilised colostral concentrate fed to newborn calves resulted in a rapid increase in serum antibody response. The lyophilised colostrum could be used for **passive immunisation** to campylobacteriosis.
SECTION HEADING: MICROBIOLOGY
DESCRIPTORS: ANTIBODIES; BACTERIA; CAMPYLOBACTER JEJUNI; COLOSTRUM; FORMATION

6/9/36 (Item 1 from file: 162)
DIALOG(R)File 162:CAB HEALTH

00590115 CAB Accession Number: 962008925
An unusual case of refractory Campylobacter **jejuni infection in a patient with X-linked agammaglobulinemia: successful combined therapy with maternal plasma and ciprofloxacin.**
Autenrieth, I. B.; Schuster, V.; Ewald, J.; Harmsen, D.; Kreth, H. W.
Institut fur Hygiene und Mikrobiologie der Universitat Wurzburg, Josef-Schneider-Strasse 2, Bau 17, D-97080 Wurzburg, Germany.
Clinical Infectious Diseases vol. 23 (3): p.526-531
Publication Year: 1996
ISSN: 1058-4838
Language: English
Document Type: Journal article
An unusual hippurate-negative strain of Campylobacter jejuni caused a chronic refractory infection in a patient in Germany with X-linked agammaglobulinaemia; this infection persisted for >2 years despite therapy with various antibiotics and immunoglobulins (Igs). To characterize the defense status of this patient, several in vitro studies, including those with T cells and polymorphonuclear leukocytes (PMNLs), were performed. T cell responses specific for C. jejuni were only weak in this patient. Chemiluminescence and bacterial killing studies with PMNLs revealed that the bactericidal activity of PMNLs against Campylobacter was enhanced more vigorously by maternal serum than by commercial Ig preparations. On the basis of these results, combined treatment with ciprofloxacin and maternal plasma was initiated, and the C. jejuni infection was rapidly cured. This case report shows that in vitro immunologic assays may be useful for characterizing immune functions of patients with chronic or refractory C. jejuni infections, thus leading to individual treatment strategies. 18 ref.

DESCRIPTORS: human diseases; case reports; infection; therapy; blood plasma; ciprofloxacin; immunoglobulins; **passive immunization**; infections; drug therapy; immunocompromised hosts
ORGANISM DESCRIPTORS: man; Campylobacter jejuni
GEOGRAPHIC NAMES: Germany; Europe
BROADER TERMS: Homo; Hominidae; Primates; mammals; vertebrates; Chordata; animals; Campylobacter; Spirillaceae; Gracilicutes; bacteria; prokaryotes; European Union Countries; Developed Countries; OECD Countries; Western Europe; Europe
CABICODES: Parasites, Vectors, Pathogens & Biogenic Diseases of Humans (VV200)

6/9/38 (Item 3 from file: 162)
DIALOG(R)File 162:CAB HEALTH

00433898 CAB Accession Number: 920456532
Study of the anti- Campylobacter **immune response in human milk.**
Original Title: Etude de la reponse immunitaire anti-**Campylobacter** dans le lait maternel.
Renom, G.; Kirimat, M.; Georges-Courbot, M. C.; Georges, A. J.; Martin, P. M. V.
Institut Pasteur, BP 923, Bangui, Central African Republic.
Bulletin de la Societe de Pathologie Exotique et de ses Filiales vol. 84 (5/5 bis): p.948-949
Publication Year: 1991
Language: French
Document Type: Conference paper; Abstract only
Campylobacter coli and C. jejuni are 2 of the major organisms that cause diarrhoea in infants <1 yr old in developing countries. In addition to immunity gained post-infection, many infants have **immunity** gained both from **passive** transfer of serum IgG from their mothers and also from IgA ingested in milk during breast-feeding. 126 samples of milk from women from the Central African Republic and 34 from French women were tested with a purified flagellin of Campylobacter, using an ELISA. IgA-type anti-flagellin antibodies were found in all the African samples and in 88% (30/34) of the French samples. IgG-type anti-flagellin antibodies were found in only 5 of the African samples (4%) and in none of the French samples. First results indicated that, although the levels of total IgA in colostrum were 25x higher than in milk, the specific anti-flagellin activity was constant throughout lactation and was no higher in milk from African than in that from French women. The isotype-dependent character of this immune response and its protective effects in infants are further discussed.

DESCRIPTORS: Immunoglobulins; IgG; antibodies; human milk; IgA
IDENTIFIERS: Third International Congress of Tropical Medicine in the French Language
ORGANISM DESCRIPTORS: Campylobacter jejuni; Campylobacter pylori
GEOGRAPHIC NAMES: Central African Republic; France
BROADER TERMS: Campylobacter; Spirillaceae; Gracilicutes; bacteria; prokaryotes; Central Africa; Africa South of Sahara; Africa; Western Europe; Europe; Mediterranean Region
CABICODES: General Molecular Biology (ZZ360); Human Nutrition (General) (VV100)

6/9/41 (Item 3 from file: 50)
DIALOG(R)File 50:CAB Abstracts

02630097 CAB Accession Number: 920456532
Study of the anti- Campylobacter **immune response in human milk.**
Original Title: Etude de la reponse immunitaire anti-**Campylobacter** dans le lait maternel.
Renom, G.; Kirimat, M.; Georges-Courbot, M. C.; Georges, A. J.; Martin, P. M. V.
Institut Pasteur, BP 923, Bangui, Central African Republic.
Bulletin de la Societe de Pathologie Exotique et de ses Filiales vol. 84 (5/5 bis): p.948-949
Publication Year: 1991 --
Language: French
Document Type: Conference paper; Abstract only
Campylobacter coli and C. jejuni are 2 of the major organisms that cause diarrhoea in infants <1 yr old in developing countries. In addition to immunity gained post-infection, many infants have **immunity** gained both from **passive** transfer of serum IgG from their mothers and also from IgA

ingested in milk during breast-feeding. 126 samples of milk from women from the Central African Republic and 34 from French women were tested with a purified flagellin of Campylobacter, using an ELISA. IgA-type anti-flagellin antibodies were found in all the African samples and in 88% (30/34) of the French samples. IgG-type anti-flagellin antibodies were found in only 5 of the African samples (4%) and in none of the French samples. First results indicated that, although the levels of total IgA in colostrum were 25x higher than in milk, the specific anti-flagellin activity was constant throughout lactation and was no higher in milk from African than in that from French women. The isotype-dependent character of this immune response and its protective effects in infants are further discussed.

DESCRIPTORS: Immunoglobulins; IgG; antibodies; human milk; IgA
IDENTIFIERS: Campylobacter pylori; Third International Congress of Tropical Medicine in the French Language
ORGANISM DESCRIPTORS: Campylobacter jejuni
GEOGRAPHIC NAMES: Central African Republic; France
BROADER TERMS: Campylobacter; Spirillaceae; Gracilicutes; bacteria; prokaryotes; Central Africa; Africa South of Sahara; Africa; Western Europe; Europe; Mediterranean Countries
CABICODES: General Molecular Biology (ZZ360); Human Nutrition (General) (VV100)

6/9/56 (Item 1 from file: 151)
DIALOG(R)File 151:HealthSTAR

02385371 95014937
Persistence of Campylobacter **fetus bacteremia associated with absence of opsonizing antibodies.**
Neuzil KM; Wang E; Haas DW; Blaser MJ
Division of Infectious Diseases, Vanderbilt University School of Medicine, Nashville, Tennessee 37232.
J Clin Microbiol (UNITED STATES) Jul 1994, 32 (7) p1718-20,
ISSN: 0095-1137 JOURNAL CODE: HSH
Contract/Grant No.: GM07569 GM NIGMS; RO1 AI 24145 AI NIAID
Languages: ENGLISH
Document Type: JOURNAL ARTICLE
Journal Announcement: 9501
SUBFILE: INDEX MEDICUS MED/95014937
Campylobacter fetus causes systemic infections in immunocompromised hosts. We describe a case in which C. fetus bacteremia apparently relapsed after 7 years in a patient with hypogammaglobulinemia and characterize the serum resistance of the patient's C. fetus strain and the inability of the patient's serum, with and without commercial intravenous immunoglobulin, to opsonize this and another C. fetus strain effectively. The probable presence of a sequestered site of infection in bone, the intrinsic serum resistance of the C. fetus strain, and the absence of specific antibody may account for the persistent infection in this patient. These studies suggest that intravenous immunoglobulin treatment is not useful in eradicating C. fetus bacteremia.
Tags: Case Report; Human; Male; Support, U.S. Gov't, P.H.S.
Descriptors: *Agammaglobulinemia--Complications--CO; *Antibodies, Bacterial--Immunology--IM; *Bacteremia--Immunology--IM; *Campylobacter fetus--Immunology--IM; Bacteremia--Etiology--ET; Bacteremia--Therapy--TH; Blood Bactericidal Activity; **Immunization , Passive** ; Middle Age; Opsonins--Immunology--IM; Recurrence; Treatment Failure
CAS REGISTRY NO.: 0 (Antibodies, Bacterial); 0 (Opsonins)

6/9/58 (Item 1 from file: 10)
DIALOG(R)File 10:AGRICOLA

3363697 20390477 Holding Library: AGL

Production of hyperimmune bovine colostrum against Campylobacter **jejuni**
Husu, J. Syvaoja, E.L.; Ahola-Luttila, H.; Kalsta, H.; Sivela, S.; Kosunen, T.U.
Oxford ; New York : Blackwell Scientific, 1954-
The Journal of applied bacteriology. May 1993. v. 74 (5) p. 564-569.
ISSN: 0021-8847 CODEN: JABAA4
DNAL CALL NO: 448.39 So12
Language: English
Includes references
Place of Publication: England
Subfile: IND; OTHER FOREIGN;
Document Type: Article

Serial immunization of dairy cows with Campylobacter jejuni resulted in an enhanced serum antibody response and production of hyperimmune colostrum in all vaccinated animals. An approximate 10-fold decrease in the Camp. jejuni-specific antibody titers in colostrum was observed within 2 d post-partum. The lyophilized colostral concentrate fed to newborn calves resulted in a rapid increase in serum antibody response. Specific Camp. jejuni immunoglobulins could be detected in these animals for a further 10 weeks. The lyophilized hyperimmunized colostrum was very stable in vitro at different storage temperatures. It could be used for **passive immunization** to campylobacteriosis.

DESCRIPTORS: dairy cows - calves - campylobacter jejuni - cow colostrum - **passive immunization** - hyperimmunization - antibody formation - reservoir hosts - bacterial diseases;
Identifiers: campylobacteriosis
Section Headings: L832 ANIMAL DISEASES-BACTERIAL

6/9/61 (Item 1 from file: 203)
DIALOG(R)File 203:AGRIS

02005778 AGRIS No: 96-087763
Detection of Campylobacter **jejuni antibody in layer hens and progeny; [Abstract]**
Shanker, S.; Lee, A.; Sorrell, T.C.
Journal: Microbial Ecology in Health and Disease, 1991, v. 4(special) p. S84
Notes: VI International Workshop on Campylobacter Helicobacter and related organisms, october 7-10th 1991, Sydney, Australia.
Language: English
Place of Publication: United Kingdom
Document Type: Journal Article,
Journal Announcement: 2207 Record input by United Kingdom

Descriptors in English: *LAYER CHICKENS; *MATERNAL IMMUNITY; *ELISA; * CAMPYLOBACTER JEJUNI; BACTERIA; BIRDS; CAMPYLOBACTER; CHICKENS; DOMESTIC ANIMALS; DOMESTICATED BIRDS; GALLIFORMES; IMMUNITY; IMMUNOENZYME TECHNIQUES; **IMMUNOLOGICAL** TECHNIQUES; LIVESTOCK; **PASSIVE IMMUNITY** ; POULTRY; SPIRILLACEAE; USEFUL ANIMALS;

Descriptors in Spanish: *GALLINA PONEDORA; *INMUNIDAD MATERNAL; *ELISA; * CAMPYLOBACTER JEJUNI; ANIMALES DOMESTICOS; ANIMALES UTILES; AVES DE CORRAL; AVES DOMESTICAS; BACTERIA; CAMPYLOBACTER; GALLIFORMES; GANADO; INMUNIDAD; INMUNIDAD PASIVA; PAJAROS; POLLO; SPIRILLACEAE; TECNICAS INMUNOENZIMATICAS; TECNICAS INMUNOLOGICAS;

Descriptors in French: *POULE PONDEUSE; *IMMUNITE MATERNELLE; *TEST ELISA ; *CAMPYLOBACTER JEJUNI; ANIMAL DOMESTIQUE; ANIMAL UTILE; BACTERIA; BETAIL; CAMPYLOBACTER; GALLIFORMES; **IMMUNITE ; IMMUNITE PASSIVE ; OISEAU^** ; OISEAU DOMESTIQUE; POULET; SPIRILLACEAE; TECHNIQUE IMMUNOENZYMATIQUE; TECHNIQUE IMMUNOLOGIQUE; VOLAILLE;
Section Headings: L73 (ANIMAL PRODUCTION -- Animal diseases)
?logoff hold

Descriptors: *Campylobacter Infections--etiology--ET; *Campylobacter jejuni--pathogenicity--PY; *Flagella; *Intestines--microbiology--MI; *Variation (Genetics); Animals, Newborn; Campylobacter jejuni--growth and development--GD; Mice; Phenotype; Species Specificity; Virulence
Record Date Created: 19930831

4/9/22 (Item 22 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07212398 90202702 PMID: 2318805
Genomic organization and expression of Campylobacter **flagellin genes.**
Guerry P; Logan SM; Thornton S; Trust TJ
Infectious Diseases Department, Naval Medical Research Institute, Bethesda, Maryland 20814.
Journal of bacteriology (UNITED STATES) Apr 1990, 172 (4) p1853-60, ISSN 0021-9193 Journal Code: HH3
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS
Campylobacter coli VC167, which undergoes an antigenic flagellar variation, contains two full-length flagellin genes, flaA and flaB, that are located adjacent to one another in a tandem orientation and are 91.5% homologous. The gene product of flaB, which has an Mr of 58,946, has 93% sequence homology to the gene product of flaA, which has an Mr of 58,916 (S. M. Logan, T. J. Trust, and P. Guerry, J. Bacteriol. 171:3031-3038, 1989). Mutational analyses and primer extension experiments indicated that the two genes are transcribed under the control of distinct promoters but that they are expressed concomitantly in the same cell, regardless of the antigenic phase of flagella being produced. The flaA gene, which was expressed at higher levels than the flaB gene in both phases, was transcribed from a typical sigma 28-type promoter, whereas the flaB promoter was unusual. A mutant producing only the flaB gene product did not synthesize a flagellar filament and was **nonmotile** . Southern blot analysis indicated that flagellar antigenic variation involves a rearrangement of flagellin sequence information rather than the alternate expression of the two distinct genes.
Tags: Comparative Study; Support, Non-U.S. Gov't; Support, U.S. Gov't, Non-P.H.S.
Descriptors: *Bacterial Proteins--genetics--GE; *Campylobacter--genetics --GE; *Flagellin--genetics--GE; *Genes, Bacterial; Amino Acid Sequence; Base Sequence; Blotting, Western; Cloning, Molecular; DNA, Bacterial --genetics--GE; Molecular Sequence Data; Mutation; Nucleic Acid Hybridization; Plasmids; Promoter Regions (Genetics); Restriction Mapping; Sequence Homology, Nucleic Acid; Variation (Genetics)
Molecular Sequence Databank No.: GENBANK/M35141
CAS Registry No.: 0 (Bacterial Proteins); 0 (DNA, Bacterial); 0 (Plasmids); 12777-81-0 (Flagellin)
Record Date Created: 19900502

4/9/23 (Item 23 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07044219 93297967 PMID: 8517729
Role of Campylobacter **jejuni flagella as colonization factors for three-day-old chicks: analysis with flagellar mutants.**
Nachamkin I; Yang XH; Stern NJ
Department of Pathology, University of Pennsylvania School of Medicine, Philadelphia 19104-4283.
Applied and environmental microbiology (UNITED STATES) May 1993, 59 (5) p1269-73, ISSN 0099-2240 Journal Code: 6K6
Contract/Grant No.: AI-24122, AI, NIAID
Languages: ENGLISH

Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS

Campylobacter jejuni, an important cause of human gastrointestinal infection, is a major food-borne pathogen in the United States and worldwide. Since poultry becomes colonized and/or contaminated during the early stages of production and is a major food-borne source for this organism, we studied the role of C. jejuni flagella on the ability of the bacterium to colonize the chicken gastrointestinal tract. Three-day-old chicks were orally challenged with a motile wild-type strain of C. jejuni IN9 or with flagellar mutants created from IN9 by disrupting the flagellin genes with a kanamycin resistance cassette by using shuttle mutagenesis (A. Labigne-Roussel, P. Courcoux, and L. Tompkins, J. Bacteriol. 170:1704-1708, 1988). One mutant, IN9-N3, lacked flagella and was **nonmotile** . The other, IN9-N7, produced a truncated flagellum and was partially motile. Three-day-old chicks were orally challenged with different doses of the wild-type strain and the two mutants. At challenge doses ranging from 3.0 x 10(4) to 6.6 x 10(8) CFU per chick, only the fully motile, wild-type strain colonized the chick ceca. Our results show that intact and motile flagella are important colonization factors for C. jejuni in chicks.

Tags: Animal; Support, U.S. Gov't, P.H.S.

Descriptors: *Campylobacter jejuni--pathogenicity--PY; *Flagella --physiology--PH; Campylobacter jejuni--genetics--GE; Campylobacter jejuni --growth and development--GD; Cell Movement--genetics--GE; Cell Movement --physiology--PH; Chickens--microbiology--MI; Flagella--ultrastructure--UL; Flagellin--genetics--GE; Gastrointestinal System--microbiology--MI; Genes, Bacterial; Microscopy, Electron; Mutagenesis, Insertional

CAS Registry No.: 12777-81-0 (Flagellin)

Gene Symbol: ist/GeneSymbol flaA; ist/GeneSymbol flaB

Record Date Created: 19930721

4/9/24 (Item 24 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

07041519 93293313 PMID: 8514397

A Campylobacter jejuni homolog of the LcrD/FlbF family of proteins is necessary for flagellar biogenesis.

Miller S; Pesci EC; Pickett CL

Department of Microbiology and Immunology, Chandler Medical Center, University of Kentucky, Lexington 40536-0084.

Infection and immunity (UNITED STATES) Jul 1993, 61 (7) p2930-6, ISSN 0019-9567 Journal Code: GO7

Contract/Grant No.: AI-27908, AI, NIAID

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

A Campylobacter jejuni homolog of the lcrD/flbF family of genes was cloned and sequenced. The nucleotide sequence of the gene, called flbA, predicted a protein of 78,864 Da, with significant homology to a group of related proteins including the Yersinia pestis LcrD, Salmonella typhimurium InvA, and Caulobacter crescentus FlbF proteins. The greatest homology was seen with the C. crescentus FlbF protein, with an overall amino acid sequence homology of 57%. An insertion mutation in the C. jejuni 81-176 flbA gene was constructed. The resultant strain did not synthesize flagellin and was **nonmotile** .

Tags: Support, U.S. Gov't, P.H.S.

Descriptors: *Bacterial Proteins--genetics--GE; *Campylobacter jejuni --genetics--GE; *Flagella--physiology--PH; *Flagellin--genetics--GE; Amino Acid Sequence; Bacterial Proteins--chemistry--CH; Bacterial Proteins --metabolism--ME; Base Sequence; Campylobacter jejuni--pathogenicity--PY; Cloning, Molecular; Genes, Bacterial; Molecular Sequence Data; Mutation; Sequence Homology, Nucleic Acid; Virulence

Molecular Sequence Databank No.: GENBANK/L12744

CAS Registry No.: 0 (Bacterial Proteins); 0 (flbA protein);

12777-81-0 (Flagellin)
Gene Symbol: ist/GeneSymbol flbA
Record Date Created: 19930722

4/9/30 (Item 30 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

06128614 86036135 PMID: 4056739
Motility as an intestinal colonization factor for Campylobacter **jejuni**.
Morooka T; Umeda A; Amako K
Journal of general microbiology (ENGLAND) Aug 1985, 131 (Pt 8) p1973-80, ISSN 0022-1287 Journal Code: I87
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS
The colonization of the intestinal tract of suckling mice by Campylobacter jejuni was examined by orally challenging the mice with a wild-type strain and several **nonmotile** mutant strains which were isolated after treating the wild-type strain with mutagens. The wild-type strain had colonized the lower portion of the small intestine, the caecum and the colon 2 d after inoculation. Two **nonmotile** strains, one of which (M8) had lost all the flagellar structure including the filament, the hook and the basal structure, and the other (M1) which had lost only the filament region, were both cleared from the intestinal tract 2 d after challenge. Another **nonmotile** strain (M14), which had a complete flagellar structure like that of the wild-type strain, did not colonize and was cleared from the intestinal tract like the other **nonmotile** and nonflagellated strains. One atypically motile strain (M5), which had a shorter flagellar filament than that of the wild-type strain, colonized the intestinal tract only when mice were challenged with a large inoculum. None of the mice challenged with either the wild-type or any of the mutant strains showed signs of illness. We concluded that motility is an important factor in the colonization of the intestinal tract of suckling mice by C. jejuni.
Tags: Animal
Descriptors: *Campylobacter--pathogenicity--PY; *Gastrointestinal System --microbiology--MI; Adhesiveness; Campylobacter--ultrastructure--UL; Flagella--analysis--AN; Locomotion; Mice; Microscopy, Electron; Mutation
Record Date Created: 19851218

4/9/32 (Item 32 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

05574354 89173302 PMID: 2466792
Flagellin expression in Campylobacter **jejuni is regulated at the transcriptional level**.
Nuijten PJ; Bleumink-Pluym NM; Gaastra W; van der Zeijst BA
Department of Bacteriology, School of Veterinary Medicine, University of Utrecht, The Netherlands.
Infection and immunity (UNITED STATES) Apr 1989, 57 (4) p1084-8, ISSN 0019-9567 Journal Code: GO7
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS
Campylobacter jejuni 81116 is able to switch flagellum formation on and off. To study the expression of flagellin, the main component of flagella, an expression library of C. jejuni DNA was constructed in lambda gt11. Screening of this library with a flagellin-specific antiserum resulted in a clone producing a beta-galactosidase-flagellin fusion protein; it contained a DNA insert of 850 base pairs and coded for about 15 kilodaltons of the flagellin, corresponding to 410 base pairs of the flagellin gene. To study the regulation of the on-and-off switch of flagellum production, a

nonmotile variant was isolated from semisolid medium. Western blots (immunoblots) showed the absence of flagellin in the **nonmotile** form. Southern blots of digested DNA of both motile, flagellate bacteria and **nonmotile** , aflagellate bacteria were identical, while Northern (RNA) blot analysis showed the absence of flagellin mRNA in the aflagellate form. Thus, it is concluded that reversible flagellin expression is regulated at the transcriptional level. Southern blots suggest that more than one flagellin gene is present. The structure and function of campylobacter flagellin can now be further investigated at the DNA level.

Descriptors: *Bacterial Proteins--genetics--GE; *Campylobacter fetus --genetics--GE; *Flagellin--genetics--GE; *Gene Expression Regulation; *Genes, Bacterial; *Transcription, Genetic; Campylobacter fetus--physiology --PH; Cell Movement; Cloning, Molecular; Flagellin--biosynthesis--BI; Flagellin--metabolism--ME; RNA, Bacterial--isolation and purification--IP

CAS Registry No.: 0 (Bacterial Proteins); 0 (RNA, Bacterial); 12777-81-0 (Flagellin)

Record Date Created: 19890505

4/9/34 (Item 34 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

04559208 84201208 PMID: 6721298

Persistent Campylobacter **jejuni infection in an immunocompromised patient.**

Johnson RJ; Nolan C; Wang SP; Shelton WR; Blaser MJ

Annals of internal medicine (UNITED STATES) Jun 1984, 100 (6) p832-4 , ISSN 0003-4819 Journal Code: 5A6

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: AIM; INDEX MEDICUS

Recurrent bacteremia and enteritis due to a specific serotype of Campylobacter jejuni occurred over a 12-month period in a patient on hemodialysis with systemic lupus erythematosus who was also **deficient** in serum IgA and IgM. A bactericidal defect in the patient's sera for C. jejuni was shown. A role for immunoglobulins in the host response to C. jejuni is suggested, in that the IgA deficiency may have predisposed the patient to chronic gastrointestinal carriage and because the resolution of the bacteremia corresponded with the delayed appearance in the blood of IgG specific for the infecting strain.

Tags: Case Report; Female; Human; Support, Non-U.S. Gov't; Support, U.S. Gov't, Non-P.H.S.

Descriptors: *Campylobacter Infections--etiology--ET; *Lupus Erythematosus, Systemic--complications--CO; Adult; Antibodies, Bacterial --analysis--AN; Blood Bactericidal Activity; Campylobacter Infections --immunology--IM; Campylobacter fetus--immunology--IM; Enteritis--etiology --ET; IgA--analysis--AN; IgA--deficiency--DF; IgM--deficiency--DF; Lupus Erythematosus, Systemic--immunology--IM; Recurrence; Septicemia--etiology --ET

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (IgA); 0 (IgM)

Record Date Created: 19840618

4/9/35 (Item 35 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

04264444 82133356 PMID: 7059067

Campylobacter **enteritis in immune-** deficient **patients.**

Ahnen DJ; Brown WR

Annals of internal medicine (UNITED STATES) Feb 1982, 96 (2) p187-8, ISSN 0003-4819 Journal Code: 5A6

Contract/Grant No.: AM0738, AM, NIADDK; RR-0051, RR, NCRR

Languages: ENGLISH

Document type: Journal Article

Record type: Completed
Subfile: AIM; INDEX MEDICUS
Tags: Case Report; Female; Human; Male; Support, U.S. Gov't, Non-P.H.S.; Support, U.S. Gov't, P.H.S.
Descriptors: *Agammaglobulinemia--complications--CO; *Campylobacter Infections--complications--CO; *Enteritis--complications--CO; Diarrhea --etiology--ET; Middle Age; Proctitis--complications--CO
Record Date Created: 19820420

4/9/36 (Item 36 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

03959326 84258354 PMID: 6430392
Campylobacter **infection mimicking Crohn's disease in an immuno-deficient patient.**
Green ES; Parker NE; Gellert AR; Beck ER
British medical journal (ENGLAND) Jul 21 1984, 289 (6438) p159-60, ISSN 0267-0623 Journal Code: B4X
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: AIM; INDEX MEDICUS
Tags: Case Report; Human; Male
Descriptors: *Campylobacter Infections--diagnosis--DI; *Crohn Disease --diagnosis--DI; *Immunologic Deficiency Syndromes--complications--CO; Campylobacter Infections--complications--CO; Diagnosis, Differential; Diarrhea--etiology--ET; Middle Age
Record Date Created: 19840824

4/9/39 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09321003 BIOSIS NO.: 199497329373
The role of flagella of Campylobacter **jejuni in the colonization in the intestinal tract of mice and the cultured-cell infectivity.**
AUTHOR: Yanagawa Yoshitoki; Takahashi Masaki; Itoh Takeshi
AUTHOR ADDRESS: Tokyo Metropolitan Res. Lab. Public Health, Tokyo**Japan
JOURNAL: Japanese Journal of Bacteriology 49 (2):p395-403 1994
ISSN: 0021-4930
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: Japanese; Non-English
SUMMARY LANGUAGE: Japanese; English

ABSTRACT: For analyzing the role of the bacterial flagella in colonization in the intestinal tract of mice and adhering to or invading the Intestine 407 cell, a nonflagellated, **nonmotile** mutant was induced by ultraviolet irradiation of a flagellated, motile wild-type strain of Campylobacter jejuni CF84-340. There was no great difference in the cellular infectivity to the Intestine 407 cells between the wild-type and the mutant strains. Cellular adherence and invasiveness were then compared by flourescent antibody staining, and an obvious difference was found in the latter. While 21.4% of the organisms of the wild-type strain invaded the cells, only 6.1% of those of the flagella-defective mutant did so. In the experiments in mice involving oral administration, cellular invasiveness was not found with the flagella-defective mutant and no organisms were detected from the blood, although bacteremia is one of the characteristics of infection with C. jejuni. Moreover, no intestinal adherence of the mutant was detected, suggesting early elimination of the organism administered. These results indicate that the bacterial flagella are concerned in not only the cellular adherence and intestinal deposit, but also the intracellular invasiveness and invasion into the blood stream from the intestinal wall in the infected mice.

DESCRIPTORS:
MAJOR CONCEPTS: Cell Biology; Gastroenterology (Human Medicine, Medical Sciences); Hematology (Human Medicine, Medical Sciences); Infection; Physiology
BIOSYSTEMATIC NAMES: Aerobic Helical or Vibrioid Gram-Negatives--Eubacteria, Bacteria; Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: aerobic helical or vibrioid gram-negative bacteria (Aerobic Helical or Vibrioid Gram-Negatives); Campylobacter jejuni (Aerobic Helical or Vibrioid Gram-Negatives); INTESTINE 407 (Hominidae)--cell line
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): animals; bacteria; chordates; eubacteria; humans; mammals; microorganisms; primates; vertebrates
MISCELLANEOUS TERMS: ADHERENCE; BLOODSTREAM PENETRATION; INTESTINAL WALL TRANSLOCATION; INVASIVENESS; VIRULENCE FACTOR
CONCEPT CODES:
02506 Cytology and Cytochemistry-Animal
12100 Movement (1971-)
14006 Digestive System-Pathology
15006 Blood, Blood-Forming Organs and Body Fluids-Blood, Lymphatic and Reticuloendothelial Pathologies
30500 Morphology and Cytology of Bacteria
36002 Medical and Clinical Microbiology-Bacteriology
BIOSYSTEMATIC CODES:
06210 Aerobic Helical or Vibrioid Gram-Negatives (1992-)
86215 Hominidae

4/9/42 (Item 6 from file: 5)

04210081 BIOSIS NO.: 000077036125
CAMPYLOBACTER-**FETUS-SSP-JEJUNI ENTERITIS IN NORMAL AND IMMUNO** DEFICIENT **CHILDREN**
AUTHOR: MELAMED I; BUJANOVER Y; IGRA Y S; SCHWARTZ D; ZAKUTH V; SPIRER Z
AUTHOR ADDRESS: PEDIATR. DEP., ROKACH HADASSAH HOSP., PO BOX 51, 61000 TEL-AVIV, ISRAEL.
JOURNAL: AM J DIS CHILD 137 (8). 1983. 752-753. 1983
FULL JOURNAL NAME: American Journal of Diseases of Children
CODEN: AJDCA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Over 16 mo., 51 cases of C. fetus ssp.jejuni gastroenteritis in children were diagnosed. Five of the children were previously known to be immunodeficient: 2 had X-linked agammaglobulinemia, 1 agammaglobulinemia, 1 combined immunodeficiency and 1 transient hypogammaglobulinemia. Average duration of fever and diarrhea was longer in the 5 immunodeficient children (15 and 23 days, respectively) compared with the normal children (4 and 5 days, respectively). Excretion of C. fetus ssp. jejuni in stools persisted for 20-27 days in 4 of the immunodeficient children and for 1 yr in the 5th; normal children excreted C. fetus ssp. jejuni for 4-16 days. C. fetus jejuni may be added to the list of bacterial pathogens most likely to infect immunodeficient children, especially those with a defect of the humoral system.

DESCRIPTORS: X LINKED AGAMMA GLOBULINEMIA COMBINED IMMUNO DEFICIENCY TRANSIENT HYPO GAMMA GLOBULINEMIA HUMORAL SYSTEM DEFECT FEVER DURATION DIARRHEA DURATION FECAL SHEDDING DURATION
CONCEPT CODES:
14006 Digestive System-Pathology
25000 Pediatrics
34504 Immunology and Immunochemistry-Bacterial, Viral and Fungal
34508 Immunology and Immunochemistry-Immunopathology, Tissue Immunology
36002 Medical and Clinical Microbiology-Bacteriology

03508 Genetics and Cytogenetics-Human
10064 Biochemical Studies-Proteins, Peptides and Amino Acids
10068 Biochemical Studies-Carbohydrates
12503 Pathology, General and Miscellaneous-Comparative (1970-)
12504 Pathology, General and Miscellaneous-Diagnostic
12508 Pathology, General and Miscellaneous-Inflammation and Inflammatory Disease
13004 Metabolism-Carbohydrates
13012 Metabolism-Proteins, Peptides and Amino Acids
13020 Metabolism-Metabolic Disorders
14001 Digestive System-General; Methods
15006 Blood, Blood-Forming Organs and Body Fluids-Blood, Lymphatic and Reticuloendothelial Pathologies
23006 Temperature: Its Measurement, Effects and Regulation-Hypothermia, Hyperthermia
23007 Temperature: Its Measurement, Effects and Regulation-Thermopathology (1971-)
37010 Public Health-Public Health Administration and Statistics
37400 Public Health: Microbiology

BIOSYSTEMATIC CODES:
04610 Spirillaceae (1979-)
86215 Hominidae

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA):
Microorganisms
Bacteria
Animals
Chordates
Vertebrates
Mammals
Primates
Humans

4/9/44 (Item 8 from file: 5)

03429659 BIOSIS NO.: 000023002747
CAMPYLOBACTER-**FETUS-SSP-JEJUNI ENTERITIS IN IMMUNO** DEFICIENT **PATIENTS**
AUTHOR: AHNEN D J; BROWN W R
AUTHOR ADDRESS: GASTROENTEROL. SECTION 1055 CLERMONT ST., DENVER, COLO.
JOURNAL: ANN INTERN MED 96 (2). 1982. 187-188. 1982
FULL JOURNAL NAME: Annals of Internal Medicine
CODEN: AIMEA
RECORD TYPE: Citation
LANGUAGE: ENGLISH
DESCRIPTORS: DIARRHEA COLITIS ILEITIS
CONCEPT CODES:
14006 Digestive System-Pathology
34504 Immunology and Immunochemistry-Bacterial, Viral and Fungal
34508 Immunology and Immunochemistry-Immunopathology, Tissue Immunology
36002 Medical and Clinical Microbiology-Bacteriology
12508 Pathology, General and Miscellaneous-Inflammation and Inflammatory Disease
14001 Digestive System-General; Methods
34502 Immunology and Immunochemistry-General; Methods

BIOSYSTEMATIC CODES:
04610 Spirillaceae (1979-)
86215 Hominidae

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA):
Microorganisms
Bacteria
Animals
Chordates
Vertebrates
Mammals
Primates

Humans

4/9/45 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

06959410 EMBASE No: 1997243979
The flgE gene of Campylobacter **coli is under the control of the alternative sigma factor sigmasup 5sup 4**
Kinsella N.; Guerry P.; Cooney J.; Trust T.J.
T.J. Trust, Astra Research Centre, Cambridge, MA 02139 United States
AUTHOR EMAIL: Tjtrust@aol.com
Journal of Bacteriology (J. BACTERIOL.) (United States) 1997, 179/15 (4647-4653)
CODEN: JOBAA ISSN: 0021-9193
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 51

The flgE gene encoding the flagellar hook protein of Campylobacter coli VC167-T1 was cloned by immunoscreening of a genomic library constructed in lambdaZAP Express. The flgE DNA sequence was 2,553 bp in length and encoded a protein with a deduced molecular mass of 90,639 Da. The sequence had significant homology to the 5' and 3' sequences of the flgE genes of Helicobacter pylori, Treponema phagedenis, and salmonella typhimurium. Primer extension analysis indicated that the VC167 flgE gene is controlled by a sigmasup 5sup 4 promoter. PCR analysis showed that the flgE gene size and the 5' and 3' DNA sequences were conserved among C. coli and C. jejuni strains. Southern hybridization analyses confirmed that there is considerable sequence identity among the hook genes of C. coli and C. jejuni but that there are also regions within the genes which differ. Mutants of C. coli defective in hook production were generated by allele replacement. These mutants were **nonmotile** and lacked flagellar filaments. Analyses of flgE mutants indicated that the carboxy terminus of FlgE is necessary for assembly of the hook structure but not for secretion of FlgE and that, unlike salmonellae, the lack of flgE expression does not result in repression of flagellin expression.

DRUG DESCRIPTORS:
*bacterial dna--endogenous compound--ec; *flagellin--endogenous compound --ec; *sigma factor--endogenous compound--ec
MEDICAL DESCRIPTORS:
*bacterial gene; *campylobacter coli
article; controlled study; dna sequence; nonhuman; priority journal; sequence homology
CAS REGISTRY NO.: 12777-81-0 (flagellin)
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology

4/9/48 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

04850860 EMBASE No: 1991345596
Epidemiological and clinical aspects of Campylobacter **infection in children. Local experience during 4 years at Bordeaux**
ASPECTS EPIDEMIOLOGIQUES ET CLINIQUES DE L'INFECTION A **CAMPYLOBACTER** CHEZ L'ENFANT. EXPERIENCE A BORDEAUX SUR 4 ANNEES
Sarlangue J.; Megraud F.
Hopital des Enfants, 168 Cours de l'Argonne, F-33000 Bordeaux France
Medecine et Maladies Infectieuses (MED. MAL. INFECT.) (France) 1991, 21/SPEC. ISS. OCT. (613-615)
CODEN: MMAIB ISSN: 0399-077X
DOCUMENT TYPE: Journal; Conference Paper
LANGUAGE: FRENCH SUMMARY LANGUAGE: FRENCH; ENGLISH

with single polar flagella and deoxyribonucleic acid guanine-plus-cytosine contents of 42 to 49 mol%. Wolinella succinogenes (Wolin et al.) comb. nov. is designated the type species of the genus, and ATCC 39543 is the type strain of W. succinogenes. They propose Wolinella recta sp. nov. (type strain, ATCC 33238) as the name for nine of the strains that formed a related but distinct group. They propose Campylobacter concisus sp. nov. (type strain, ATCC 33237) as the name for the 6 isolates of noncorroding, microaerophilic, gram-negative, rod-shaped bacteria that have predominantly curved cells and deoxyribonucleic acid guanine-plus-cytosine contents of 34 to 38 mol%. The description of the genus Campylobacter is amended to include species with dexoyribonucleic acid guanine-plus-cytosine contents of 30 to 38 mol%.

MEDICAL DESCRIPTORS:
*eikenella corrodens; *periodontal disease
taxonomy; in vitro study; human cell; animal experiment; classification; normal human; mouth
MEDICAL TERMS (UNCONTROLLED): bacteroides gracilis; campylobacter concisus; wolinella succinogenes; wolinella recta
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
011 Otorhinolaryngology

4/9/52 (Item 2 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

06116690 Genuine Article#: XV851 Number of References: 28
Title: Induction of anti-GM1 ganglioside antibodies by Campylobacter **jejuni lipopolysaccharides**
Author(s): Wirguin I (REPRINT) ; Briani C; SuturkovaMilosevic L; Fisher T; DellaLatta P; Chalif P; Latov N
Corporate Source: BEN GURION UNIV NEGEV,FAC HLTH SCI, SOROKA MED CTR, DEPT NEUROL, POB 151/IL-84101 BEER SHEVA//ISRAEL/ (REPRINT); COLUMBIA UNIV COLL PHYS & SURG,DEPT NEUROL/NEW YORK//NY/10032; HADASSAH UNIV HOSP,DEPT NEUROL/IL-91120 JERUSALEM//ISRAEL/
Journal: JOURNAL OF NEUROIMMUNOLOGY, 1997, V78, N1-2 (SEP), P138-142
ISSN: 0165-5728 Publication date: 19970900
Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS
Language: English Document Type: ARTICLE
Geographic Location: ISRAEL; USA
Subfile: CC LIFE--Current Contents, Life Sciences
Journal Subject Category: NEUROSCIENCES; IMMUNOLOGY
Abstract: A frequent association exists between acute motor neuropathy, antecedent Campylobacter jejuni (CJ) and anti-GM1 ganglioside antibodies. Despite the chemical and immunological similarity between CJ lipopolysaccharides (LPS) and GM1, the mechanism of induction of anti-GM1 antibodies is still unclear. We used CJ LPS to immunize rats, mice and immunodeficient mice lacking in NK, CD8+ or T-cell populations. None of these animals developed significant anti-GM1 titers. However, rats immunized with keyhole limpet hemocyanin which contains the cross-reactive sugar epitope Gal(beta 1-3)GalNAc developed high titers of IgM anti-GM1 antibodies. This occurred only after these rats were given an intraperitoneal injection of CJ LPS. These results suggest that a glycoprotein antigenic stimulus can induce B-cells which are autoreactive to ganglioside but which remain anergic. A second stimulus with a cross-reactive LPS can then overcome the anergy to induce autoantibody production. A similar mechanism may explain the occurrence of GM1 antibodies in patients after CJ enteritis. (C) 1997 Elsevier Science B.V.
Descriptors--Author Keywords: GM1 ganglioside antibodies ; Campylobacter jejuni ; lipopolysaccharides ; Guillain-Barre syndrome
Identifiers--KeyWord Plus(R): GUILLAIN-BARRE-SYNDROME; CELLS; ANTIGEN; POLYNEUROPATHY; AUTOANTIBODY; SPECIFICITY; TOLERANCE; INFECTION
Research Fronts: 95-1329 001 (ACUTE GUILLAIN-BARRE-SYNDROME; INTRAVENOUS IMMUNE GLOBULIN; IGG ANTIBODIES; INFLAMMATORY NEUROPATHIES)

95-4581 001 (MAJOR HISTOCOMPATIBILITY COMPLEX CLASS II-**DEFICIENT** MICE; CD8(+) T-CELLS; POSITIVE SELECTION)
95-5888 001 (SOLUBLE CD14; INHIBITS LIPOPOLYSACCHARIDE INDUCTION; LPS BINDING)

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4/9/54 (Item 4 from file: 34)

03699928 Genuine Article#: PY760 Number of References: 41

Title: ISOLATION OF MOTILE AND NONMOTILE **INSERTIONAL MUTANTS OF** CAMPYLOBACTER-**JEJUNI - THE ROLE OF MOTILITY IN ADHERENCE AND INVASION OF EUKARYOTIC CELLS**

Author(s): YAO RJ; BURR DH; DOIG P; TRUST TJ; NIU HY; GUERRY P
Corporate Source: USN,MED RES INST ANNEX,ENTER DIS PROGRAM,12300 WASHINGTON AVE/ROCKVILLE//MD/20852; USN,MED RES INST ANNEX,ENTER DIS PROGRAM/ROCKVILLE//MD/20852; UNIV VICTORIA,DEPT BIOCHEM & MICROBIOL/VICTORIA/BC V8W 3P6/CANADA/; US FDA/WASHINGTON//DC/20204

Journal: MOLECULAR MICROBIOLOGY, 1994, V14, N5 (DEC), P883-893
ISSN: 0950-382X
Language: ENGLISH Document Type: ARTICLE
Geographic Location: CANADA; USA
Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences
Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY; MICROBIOLOGY

Abstract: A method of insertional mutagenesis for naturally transformable organisms has been adapted from Haemophilus influenzae and applied to the study of the pathogenesis of Campylobacter jejuni. A series of kanamycin-resistant insertional mutants of C. jejuni 81-176 has been generated and screened for loss of ability to invade INT407 cells. Eight noninvasive mutants were identified which showed 18-200-fold reductions in the level of invasion compared with the parent. Three of these eight show defects in motility, and five are fully motile. The three mutants with motility defects were further characterized to evaluate the method. One mutant, K2-32, which is non-adherent and non-invasive, has an insertion of the kanamycin-resistance cassette into the flaA flagellin gene and has greatly reduced motility and a truncated flagellar filament typical of flaA mutants, The adherent

non-invasive mutants K2-37 and K2-55 are phenotypically paralysed, i.e. they have a full-length flagellar filament but are non-motile. All three mutants show an aberration in flagellar structure at the point at which the filament attaches to the cell. Mutants K2-37 and K2-55 represent overlapping deletions affecting the same gene, termed pflA (paralysed flagella), This gene encodes a predicted protein of 788 amino acid residues and a molecular weight of 90977 with no significant homology to known proteins. Site-specific insertional mutants into this open reading frame result in the same paralysed flagellar phenotype and the same invasion defects as the original mutants. The differences in adherence between the two classes of flagellar mutant suggest that flagellin can serve as a secondary adhesion, although other adhesins mediate a motility-dependent internalization process. Characterization of the mutants at the molecular level and in animal models should further contribute to our understanding of the pathogenicity of these organisms.

Identifiers--KeyWords Plus: FLAGELLIN GENES; ANTIGENIC VARIATION; SURFACE-PROTEINS; ESCHERICHIA-COLI; HELA-CELLS; MEMBRANE; IDENTIFICATION; MUTAGENESIS; ADHESION; INTERNALIZATION

Research Fronts: 93-3088 001 (RAT MUSCLE; PROTEIN PHOSPHATASE-1; MAJOR GLUTATHIONE TRANSFERASE)
93-5203 001 (GENE LOCUS; PROTEIN SECONDARY STRUCTURE; CONFORMATIONAL PREFERENCE FUNCTIONS; MEMBRANE TOPOLOGY; TISSUE-SPECIFIC EXPRESSION)

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WANG Y, 1990, V172, P949, J BACTERIOL
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4/9/55 (Item 5 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

03002031 Genuine Article#: MW002 Number of References: 10
Title: BACTEREMIA CAUSED BY CAMPYLOBACTER **SPP**
Author(s): DEGUEVARA CL; GONZALEZ J; PENA P
Corporate Source: LA PAZ HOSP,DEPT MICROBIOL,CASTELLANA 261/E-28046 MADRID//SPAIN/; LA PAZ HOSP,DEPT INTERNAL MED/E-28046 MADRID//SPAIN/
Journal: JOURNAL OF CLINICAL PATHOLOGY, 1994, V47, N2 (FEB), P174-175
ISSN: 0021-9746
Language: ENGLISH Document Type: NOTE
Geographic Location: SPAIN
Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences; CC CLIN--Current Contents, Clinical Medicine
Journal Subject Category: PATHOLOGY
Abstract: The genus Campylobacter has become increasingly recognised as the cause of various infections. Campylobacter jejuni and C coli cause acute gastroenteritis in man all over the world. C jejuni enteritis can lead to bacteraemia, but its actual incidence remains unknown.

Seven cases of bacteraemia caused by C jejuni or C coli are reported, from the blood of seven patients: five immune **deficient** adults; a newborn baby; and a patient who had had abdominal surgery. Patients who develop diarrhoea as a result of Campylobacter infection are at risk of bacteraemia thereafter.
Identifiers--KeyWords Plus: ENTERITIS; JEJUNI
Research Fronts: 92-2732 002 (CAMPYLOBACTER INFECTIONS; RIBOSOMAL-RNA GENE RESTRICTION FRAGMENT DIVERSITY; POULTRY BROILER FLOCKS)
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4/9/59 (Item 4 from file: 76)
DIALOG(R)File 76:Life Sciences Collection

01757552 3516259
Molecular and structural analysis of Campylobacter **flagellin**
Guerry, P.; Alm, R.A.; Power, M.E.; Trust, T.J.
Enteric Dis. Program, Nav. Med. Res. Inst., Bethesda, MD 20814, USA
CAMPYLOBACTER JEJUNI. CURRENT STATUS AND FUTURE TRENDS.
Nachamkin, I.; Blaser, M.J.; Tompkins, L.S.
ISBN: 1-55581-042-X
pp. 267-281 (1992)
PUBLISHER: AMERICAN SOCIETY FOR MICROBIOLOGY. WASHINGTON, DC (USA)
DOCUMENT TYPE: Book LANGUAGE: ENGLISH
SUBFILE: Microbiology Abstracts B: Bacteriology; Genetics Abstracts; Immunology Abstracts

Together with the spiral morphology of the Campylobacter cell, the motility imparted by the flagellum appears to play an important role in both the selection and ultimate colonization of their niche in the gastrointestinal tract, the viscous mucous blanket lining the tract. In addition to this virulence role, the flagellar protein is the predominant protein antigen of the Campylobacter cell. It has been a widely held notion among Campylobacter researchers that flagellin was the serodeterminant of the heat-labile serotyping scheme developed by Lior et al. However, for C.

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SYSTEM:OS  - DIALOG OneSearch
  File  73:EMBASE  1974-2001/Jul W2
        (c) 2001 Elsevier Science B.V.
*File  73: For information about Explode feature please
see Help News73.
  File   5:Biosis Previews(R)  1969-2001/Jul W3
        (c) 2001 BIOSIS
  File 144:Pascal  1973-2001/Jul W3
        (c) 2001 INIST/CNRS
  File 434:SciSearch(R) Cited Ref Sci  1974-1989/Dec
        (c) 1998 Inst for Sci Info
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        (c) format only 2001 Dialog Corporation
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        (c) 2001 LFRA
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See Help News162 for details.
  File  50:CAB Abstracts  1972-2001/Jun
        (c) 2001 CAB International
*File  50: Truncating CC codes is recommended for full retrieval.
See Help News50 for details.
  File  76:Life Sciences Collection  1982-2001/May
        (c) 2001 Cambridge Sci Abs
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        (c) format only 2000 The Dialog Corporation
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        (c) format only 2001 The Dialog Corporation
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        (c) 2001 FSTA IFIS Publishing
*File  51: This file is now updating weekly.
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*File  65: For variance in UDs please see Help News65.
  File  35:Dissertation Abs Online  1861-2001/Jul
        (c) 2001 ProQuest Info&Learning
  File  77:Conference Papers Index  1973-2001/Jul
        (c) 2001 Cambridge Sci Abs
  File 143:Biol. & Agric. Index  1983-2001/Jun
        (c) 2001 The HW Wilson Co
  File 156:Toxline(R)  1965-2000/Dec
        (c) format only 2000 The Dialog Corporation
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strategy and changes to the file please see Help News156.
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        (c) 2001 AMERICAN CHEMICAL SOCIETY
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S1         88   CAMPYLOBACT?/TI AND PASSIVE?/TI
S2         23   RD (unique items)
S3          0   S2/2000:2001
S4         23   S2 NOT S3
S5         69   (PASSIVE? (3N) IMMUN?)  AND CAMPYLOBA?/TI
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S6 63 S5 NOT S2
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6/9/3 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

05372423 EMBASE No: 1993140522
Production of hyperimmune bovine colostrum against Campylobacter **jejuni**
Husu J.; Syvaoja E.-L.; Ahola-Luttila H.; Kalsta H.; Sivela S.; Kosunen T.U.
Dept. Bacteriology and Serology, National Veterinary Institute, PO Box 368,SF-00101 Helsinki Finland
Journal of Applied Bacteriology (J. APPL. BACTERIOL.) (United Kingdom) 1993, 74/5 (564-569)
CODEN: JABAA ISSN: 0021-8847
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Serial immunization of dairy cows with Campylobacter jejuni resulted in an enhanced serum antibody response and production of hyperimmune colostrum in all vaccinated animals. An approximate 10-fold decrease in the Camp. jejuni-specific antibody titres in colostrum was observed within 2 d post-partum. The lyophilized colostral concentrate fed to newborn calves resulted in a rapid increased in serum antibody response. Specific Camp. jejuni immunoglobulins could be detected in these animals for a further 10 weeks. The lyophilized hyperimmunized colostrum was very stable in vitro at different storage temperatures. It could be used for **passive immunization** to campylobacteriosis.

DRUG DESCRIPTORS:
*bacterial vaccine--pharmacology--pd; *bacterial vaccine--drug therapy--dt; *bacterial vaccine--drug development--dv
MEDICAL DESCRIPTORS:
*antibody response; *bacterial infection--prevention--pc; *bacterial infection--drug therapy--dt; *campylobacter jejuni; *colostrum animal experiment; article; cattle; controlled study; food contamination; immunization; newborn; nonhuman
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
037 Drug Literature Index

6/9/4 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

04767274 EMBASE No: 1991262010
Antigenic shifts in serotype determinants of Campylobacter **coli are accompanied by changes in the chromosomal DNA restriction endonuclease digestion pattern**
Mills S.D.; Kurjanczyk L.A.; Shames B.; Hennessy J.N.; Penner J.L.
Department of Microbiology, University of Toronto, Banting Institute, 100 College Street,Toronto, Ont. M5G 1L5 Canada
Journal of Medical Microbiology (J. MED. MICROBIOL.) (United Kingdom) 1991, 35/3 (168-173)
CODEN: JMMIA ISSN: 0022-2615
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Changes in somatic (O) lipopolysaccharide (LPS) antigenic specificities of Campylobacter coli serostrains were observed after continuous laboratory subculture. Two serostrains (C. coli O34 and C. coli O48) lost O specificity and did not react with homologous or any of the available heterologous antisera. The C. coli serostrain for serogroup O5, after subculture, yielded a variant that had acquired a new specificity which was detectable with a heterologous antiserum. In a repeat experiment with the

original isolate of the O5 strain, a second variant was obtained which had not only acquired the same new determinant but had, unlike the first variant, lost reactivity with the homologous antiserum. Immunoblot experiments with homologous and heterologous antisera indicated that changes in antigenic specificity were associated with the O side chains of the LPS molecules. Results of restriction endonuclease analysis of chromosomal DNA of the variants and their parents revealed minor differences in restriction patterns which suggested that C. coli is capable of undergoing genomic re-arrangements that lead to changes in LPS specificity and structure.

DRUG DESCRIPTORS:
bacterial antigen; bacterium lipopolysaccharide; o antigen; plasmid dna; proteinase
MEDICAL DESCRIPTORS:
*campylobacter coli; *genetic variability; *restriction mapping; *serotype agar gel electrophoresis; article; human; **immunoblotting ; passive hemagglutination** ; polyacrylamide gel electrophoresis; priority journal; silver staining
CAS REGISTRY NO.: 9001-92-7 (proteinase)
SECTION HEADINGS:
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology

6/9/12 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

05681562 BIOSIS NO.: 000084029967
CAMPYLOBACTER-JEJUNI ISOLATED FROM CHILDREN WITH ACUTE DIARRHEA AND CONTROLS IN BELO HORIZONTE BRAZIL
AUTHOR: MENDES E N; QUEIROZ D M D M; CISALPINO E O; PERES J N; PENNA F J; FIGUEIREDO FILHO P P
AUTHOR ADDRESS: DEP. CLIN. MED., FAC. MED. UFMG, AV. ALFREDO BALENA, 190, 30000 BELO HORIZONTE MG, BRASIL.
JOURNAL: REV MICROBIOL 18 (1). 1987. 25-30. 1987
FULL JOURNAL NAME: Revista de Microbiologia
CODEN: RMBGB
RECORD TYPE: Abstract
LANGUAGE: PORTUGUESE

ABSTRACT: In the last decade, Campylobacter jejuni has been recognized as an important agent of acute diarrhoea. However, in Brazil, the pertinent bibliography is scanty, especially in Belo Horizonte, where this pathology contributes for high rates of infantile morbidity and mortality. Campylobacter jejuni were searched for in feces of 98 children with acute diarrhoea and 30 children without diarrhoea (control group), all of them younger than two years, in Belo Horizonte MG, Brazil, in the period from August/82 to January/84. Using Butzler's medium, Campylobacter jejuni were isolated from 11.2% of the patients with acute diarrhoea and from 6.6% of the control group. Using **passive immune** hemolysis, only one strain (10%) could be considered LT-enterotoxin-producing and using the suckling mouse test no one strain revealed capacity to produce ST-enterotoxin. All of the tested strains of Campylobacter jejuni (11) were sensible to Erythromycin, Gentamicin, Amikacin, Kanamycin, Neomycin and Chloranphenicol and resistant to the association of Sulfamethoxazole-trimetoprism. Only one strain was resistant to Tetracycline (9.1%) and three strains were resistant to Ampilicin (27.3%). The strains isolated from patients were placed in biotype 4 (15) and biotype 1 (Skirrow & Benjamin). In the control group the strains isolated were placed in biotype 1 (Skirrow & Benjamin) and, according to the biotyping proposal of Hebert & col. (15), one strain was placed in the biotype 3 and the other in biotype 4.

DESCRIPTORS: HEAT-LABILE TOXIN HEAT-STABLE TOXIN ANTIBIOTIC SENSITIVITY BIOTYPING
CONCEPT CODES:

Immunological relationship of the B subunits of Campylobacter **jejuni and Escherichia coli heat-labile enterotoxins.**

Klipstein FA ; Engert RF

Infection and immunity (UNITED STATES) Jun 1985, 48 (3) p629-33, ISSN 0019-9567 Journal Code: GO7

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

The application of dissociation techniques, involving gel filtration in the presence of guanidine, to a semipurified preparation of **Campylobacter** jejuni heat-labile enterotoxin yielded a material whose functional and immunological properties resemble those of the B subunits of cholera toxin and Escherichia coli heat-labile toxin (LT). The C. jejuni toxin B subunit reacted with GM1 ganglioside in an enzyme-linked immunosorbent assay, but lacked the holotoxin's cytotonic activity in the Chinese hamster ovary tissue culture assay and its ability to cause fluid secretion in rat ileal ligated loops. The C. jejuni toxin B subunit showed lines of partial identity with the B subunits of both cholera toxin and LT in gel immunodiffusion; it appeared to be more closely related immunologically to the LT B subunit than to the cholera toxin B subunit in enzyme-linked immunosorbent assays that used antisera either to LT or to its B subunit. Rats immunized with LT B subunit were significantly protected against challenge with either the semipurified C. jejuni toxin or a viable enterotoxigenic strain of C. jejuni, although twice the immunization dosage was required to achieve protection comparable to that against the homologous toxin or viable bacteria. These observations indicate that the C. jejuni enterotoxin contains a B subunit that bears an immunological relationship with the B subunits of cholera toxin and LT.

Tags: Animal; Support, Non-U.S. Gov't

Enzyme-linked immunosorbent assays for virulence properties of Campylobacter **jejuni clinical isolates.**

Klipstein FA ; Engert RF; Short HB

Journal of clinical microbiology (UNITED STATES) Jun 1986, 23 (6) p1039-43, ISSN 0095-1137 Journal Code: HSH

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

To evaluate the capacity of enzyme-linked immunosorbent assays (ELISAs) to identify pathogenic strains among clinical fecal isolates of **Campylobacter** jejuni, 40 consecutively obtained strains from 39 sick patients and 1 asymptomatic person were tested by respective ELISAs for enterotoxin production in culture filtrates and for the invasive virulence antigen of bacterial cells. Of the 40 strains, 14 produced the enterotoxin; 15 strains, two of which were also enterotoxigenic, were invasive; and 11 strains had no detectable virulence property. The presence or absence of these virulence properties was confirmed by the demonstration that viable cells of all 12 randomly selected enterotoxigenic or invasive strains tested, but none of 9 nonpathogenic strains tested, caused fluid secretion in rat ligated ileal loops. All 12 patients examined who were infected with an invasive strain had grossly or microscopically evident blood cells in their stools or both, whereas none of those infected with an enterotoxigenic strain had overtly bloody diarrhea, and only 1 of 8 patients examined had microscopically evident blood cells in the stool. Twelve of the invasive, five of the enterotoxigenic, and three of the nonpathogenic strains also produced small amounts of cytotoxin, but there was no correlation between cytotoxin production and an abnormal response in rat ligated ileal loops. These observations show that enterotoxin production or invasiveness or both can be detected by ELISAs in three-fourths of C. jejuni fecal isolates and that there is usually a relationship between the specific pathogenic property of the infecting strain and the clinical mainfestations.

Tags: Human; Support, Non-U.S. Gov't

Descriptors: **Campylobacter** fetus--pathogenicity--PY; *Enterotoxins --biosynthesis--BI; Adolescence; Adult; Antigens, Bacterial--analysis--AN; **Campylobacter** Infections--microbiology--MI; **Campylobacter** fetus --immunology--IM; **Campylobacter** fetus--isolation and purification--IP; **Campylobacter** fetus--metabolism--ME; Child; Child, Preschool; Cytotoxins --biosynthesis--BI; Diarrhea--microbiology--MI; Enzyme-Linked Immunosorbent Assay; Feces--microbiology--MI; Middle Age; Virulence

CAS Registry No.: 0 (Antigens, Bacterial); 0 (Cytotoxins); 0 (Enterotoxins)

Record Date Created: 19860627

3/9/2

DIALOG(R)File 155:MEDLINE(R)

06185182 86007054 PMID: 3899937

Pathogenic properties of Campylobacter **jejuni: assay and correlation with clinical manifestations.**

Klipstein FA ; Engert RF; Short H; Schenk EA

Infection and immunity (UNITED STATES) Oct 1985, 50 (1) p43-9, ISSN 0019-9567 Journal Code: GO7

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

The pathogenic properties of 20 strains of **Campylobacter** jejuni isolated from persons with clearly defined clinical manifestations were determined. Cell-free broth filtrates were examined for (i) enterotoxin production by Chinese hamster tissue culture assay and an enzyme-linked immunosorbent assay (ELISA) employing GM1 ganglioside and affinity-purified antiserum to Escherichia coli heat-labile toxin, (ii) cytotoxin production by Vero and HeLa cell tissue culture lines, and (iii) their ability to

cause fluid secretion in rat ligated ileal loops. Viable bacteria were examined for invasive properties by an ELISA with the immunoglobulin fraction of antiserum to Formalin-killed bacteria of an invasive strain, and by their effect on fluid secretion and morphology in rat ligated ileal loops. None of the eight isolates obtained from asymptomatic carriers had any detectable pathogenic properties. All six strains isolated from persons with bloody invasive-type diarrhea elaborated a cytotoxin; their viable bacteria had high titers in the ELISA for invasive properties and caused fluid secretion in ligated ileal loops, although consistent morphologic abnormalities and evidence of mucosal invasion, examined by immunofluorescence techniques, were not detected. All six strains isolated from persons with watery secretory-type diarrhea produced an enterotoxin, one elaborated a cytotoxin, and broth filtrates of all strains caused fluid secretion in ligated ileal loops; viable bacteria had low titers in the ELISA for invasive properties and evoked fluid secretion in ligated loops by means of enterotoxin production. These observations show (i) that a correlation exists between the pathogenic properties of the infective C. jejuni strain and gastrointestinal manifestations in the infected host, and (ii) that these pathogenic properties can be identified by in vitro assays, including ELISAs.

Tags: Animal; Human; Support, Non-U.S. Gov't

Descriptors: **Campylobacter** Infections--microbiology--MI; * **Campylobacter** fetus--pathogenicity--PY; *Diarrhea--microbiology--MI; Bacterial Toxins--immunology--IM; Biological Assay; Cattle; Cytotoxins --biosynthesis--BI; Enterotoxins--biosynthesis--BI; Enterotoxins--immunolo gy--IM; Enzyme-Linked Immunosorbent Assay; Escherichia coli--immunology--IM ; Immunization; Rabbits; Water-Electrolyte Balance

CAS Registry No.: 0 (Bacterial Toxins); 0 (Cytotoxins); 0 (Enterotoxins); 0 (enterotoxin LT)

Record Date Created: 19851029

3/9/3

DIALOG(R)File 155:MEDLINE(R)

04994382 85206293 PMID: 3922890

Immunological relationship of the B subunits of Campylobacter **jejuni and Escherichia coli heat-labile enterotoxins.**

Klipstein FA ; Engert RF

Infection and immunity (UNITED STATES) Jun 1985, 48 (3) p629-33, ISSN 0019-9567 Journal Code: GO7

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

The application of dissociation techniques, involving gel filtration in the presence of guanidine, to a semipurified preparation of **Campylobacter** jejuni heat-labile enterotoxin yielded a material whose functional and immunological properties resemble those of the B subunits of cholera toxin and Escherichia coli heat-labile toxin (LT). The C. jejuni toxin B subunit reacted with GM1 ganglioside in an enzyme-linked immunosorbent assay, but lacked the holotoxin's cytotonic activity in the Chinese hamster ovary tissue culture assay and its ability to cause fluid secretion in rat ileal ligated loops. The C. jejuni toxin B subunit showed lines of partial identity with the B subunits of both cholera toxin and LT in gel immunodiffusion; it appeared to be more closely related immunologically to the LT B subunit than to the cholera toxin B subunit in enzyme-linked immunosorbent assays that used antisera either to LT or to its B subunit. Rats immunized with LT B subunit were significantly protected against challenge with either the semipurified C. jejuni toxin or a viable enterotoxigenic strain of C. jejuni, although twice the immunization dosage was required to achieve protection comparable to that against the homologous toxin or viable bacteria. These observations indicate that the C. jejuni enterotoxin contains a B subunit that bears an immunological relationship with the B subunits of cholera toxin and LT.

Tags: Animal; Support, Non-U.S. Gov't

Descriptors: Bacterial Toxins--immunology--IM; * **Campylobacter** fetus --immunology--IM; *Enterotoxins--immunology--IM; Cholera Toxin--immunology --IM; Enzyme-Linked Immunosorbent Assay; Immunization; Immunodiffusion; Rats; Rats, Inbred Strains
CAS Registry No.: 0 (Bacterial Toxins); 0 (Enterotoxins); 0 (enterotoxin LT); 9012-63-9 (Cholera Toxin)
Record Date Created: 19850710

3/9/4
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2001 Dialog Corporation. All rts. reserv.

04799010 85035438 PMID: 6149368
Enterotoxigenic Campylobacter **jejuni among children in South India.**
Mathan VI; Rajan DP; **Klipstein FA** ; Engert RF
Lancet (ENGLAND) Oct 27 1984, 2 (8409) p981, ISSN 0140-6736 Journal Code: L0S
Languages: ENGLISH
Document type: Letter
Record type: Completed
Subfile: AIM; INDEX MEDICUS
Tags: Human
Descriptors: **Campylobacter** fetus--metabolism--ME; *Enterotoxins --biosynthesis--BI; Adolescence; Carrier State--microbiology--MI; Child; Child, Preschool; Diarrhea, Infantile--microbiology--MI; India
CAS Registry No.: 0 (Enterotoxins)
Record Date Created: 19841130

3/9/5
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2001 Dialog Corporation. All rts. reserv.

04797511 84218149 PMID: 6144853
Purification of Campylobacter **jejuni enterotoxin.**
Klipstein FA ; Engert RF
Lancet (ENGLAND) May 19 1984, 1 (8386) p1123-4, ISSN 0140-6736 Journal Code: L0S
Languages: ENGLISH
Document type: Letter
Record type: Completed
Subfile: AIM; INDEX MEDICUS
Tags: Human
Descriptors: **Campylobacter** fetus; *Endotoxins --isolation and purification--IP; **Campylobacter** fetus--metabolism--ME; Diarrhea, Infantile--microbiology--MI; Infant; Methods
CAS Registry No.: 0 (Endotoxins)
Record Date Created: 19840625

3/9/6
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2001 Dialog Corporation. All rts. reserv.

03860727 84263443 PMID: 6746090
Properties of crude Campylobacter **jejuni heat-labile enterotoxin.**
Klipstein FA ; Engert RF
Infection and immunity (UNITED STATES) Aug 1984, 45 (2) p314-9, ISSN 0019-9567 Journal Code: GO7
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS
The amount of crude **Campylobacter** jejuni enterotoxin present in culture products was quantitated by comparing the response of these preparations with that of pure Escherichia coli heat-labile toxin (LT) in the Chinese

hamster ovary assay and in enzyme-linked immunosorbent assays that used GM ganglioside or antisera to LT or both. Maximum C. jejuni enterotoxin production was achieved by growth at 42 degrees C for 24 h under agitation in supplemented GC medium. Adding polymyxin separately to either the broth supernatant or the cells enhanced the recovery of toxin; the yield from cell lysates was much lower. The quantity of C. jejuni enterotoxin produced by clinical isolates obtained locally or provided from Mexico varied widely, over a spectrum from none to large amounts; quantitative values for the amount of C. jejuni enterotoxin determined by the Chinese hamster ovary and enzyme-linked immunosorbent assays correlated with the degree of secretory potency of this material in ligated rat ileal loops. The cytotonic activity of C. jejuni enterotoxin in Chinese hamster ovary cells was abolished by heating at 96 degrees C for 10 min and by preincubation either with GM ganglioside or with LT or cholera toxin antisera. The secretory activity of C. jejuni enterotoxin in ligated rat ileal loops was passively neutralized by antiserum to LT, and immunizing rats with either LT or its B subunit significantly (P less than 0.001) reduced fluid response to active challenge with C. jejuni enterotoxin in ligated ileal loops. These observations indicate that strains of C. jejuni vary in their capacity to elaborate a heat-labile enterotoxin that has close immunological homology with LT and cholera toxin.

Tags: Animal; Support, Non-U.S. Gov't

Descriptors: Bacterial Toxins--isolation and purification--IP; * **Campylobacter** fetus--immunology--IM; *Enterotoxins --isolation and purification--IP; Bacterial Toxins--biosynthesis--BI; Bacterial Toxins --immunology--IM; Biological Assay; **Campylobacter** fetus--physiology--PH; Cross Reactions; Enterotoxins--biosynthesis--BI; Enterotoxins--immunology --IM; Enzyme-Linked Immunosorbent Assay; Gangliosides--immunology--IM; Hamsters; Macromolecular Systems; Rats

CAS Registry No.: 0 (Bacterial Toxins); 0 (Enterotoxins); 0 (Gangliosides); 0 (Macromolecular Systems); 0 (enterotoxin LT)

Record Date Created: 19840906

?logoff hold

Isolation and characterization of two Campylobacter **glycine-extracted proteins that bind to HeLa cell membranes.**

Kervella M; Pages JM; Pei Z; Grollier G; **Blaser MJ** ; Fauchere JL
Laboratoire de Bacteriologie, Faculte de Medecine Necker-Enfants Malades, Paris, France.

Infection and immunity (UNITED STATES) Aug 1993, 61 (8) p3440-8, ISSN 0019-9567 Journal Code: GO7
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS

Two immunogenic proteins of 27 (CBF1) and 29 (CBF2) **kDa** from enteropathogenic **Campylobacter** species appear to bind to mammalian cells. We purified these two proteins from a pathogenic and adherent **Campylobacter** jejuni strain to homogeneity by using acid extraction, preparative gel electrophoresis, and electroelution. **Polyclonal** rabbit **antisera** to these proteins were prepared. Immunologic studies indicate that CBF1 corresponds to the PEB1 and CBF2 corresponds to the PEB4 described by Pei et al. (Z. Pei, R. T. Ellison, and M. Blaser, J. Biol. Chem. 226:16363-16369, 1991). Immunogold labeling of a C. jejuni adherent strain with anti-CBF1, anti-CBF2, and anti-PEB1 suggested that CBF1 (PEB1) is surface exposed while CBF2 (PEB4) is not. Analysis of whole-cell extracts from **14** strains by sodium dodecyl sulfate (SDS)-polyacrylamide gel electrophoresis with 7 M urea and **immunoblotting** with **antisera** to CBF1 and CBF2 suggests that CBF proteins from adherent and nonadherent strains are different. Use of purified proteins in a microassay of adherence to cellular membranes indicated that CBF1 was much more adherent than CBF2. Adherence of C. jejuni to viable HeLa cells was markedly reduced with the **antiserum** to CBF1, whereas the CBF2 **antiserum** was a poor inhibitor. Purified CBF1 competitively inhibited adherence of whole bacteria to HeLa cells, whereas purified CBF2 was no better a competitor than bovine serum albumin. Adherence of CBF2 was markedly reduced in the presence of Tween 20 or SDS, whereas adherence of CBF1 was reduced only by SDS. We conclude that (i) CBF1 (PEB1) is surface exposed and may be the key protein for C. jejuni adhesion and (ii) CBF2 (PEB4) may be complexed with CBF1 and may passively coadhere with CBF1 under certain experimental conditions. Adherent and nonadherent strains contain different isotypes of these two proteins which could be useful markers of C. jejuni adhesion.

Tags: Human; Support, Non-U.S. Gov't; Support, U.S. Gov't, Non-P.H.S.

Toxin production by Campylobacter **spp.**

Wassenaar TM

Institute of Medical Microbiology and Hygiene, University of Mainz, Germany. wassen@mzdmza.zdv.uni-mainz.de

Clinical microbiology reviews (UNITED STATES) Jul 1997, 10 (3) p466-76, ISSN 0893-8512 Journal Code: CMR

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

Of all the virulence factors that were proposed for **Campylobacter** jejuni and related species to cause disease in humans, the discovery of toxin production was the most promising but led to a rather confusing and even disappointing stream of data. The discussion of whether proteinaceous exotoxins are relevant in disease remains open. One important reason for this lack of consensus is the anecdotal nature of the literature reports. To provide a basis for an unbiased opinion, this review compiles all described exotoxins, compares their reported properties, and provides a summary of animal model studies and clinical data. The toxins are divided into enterotoxins and cytotoxins and are sorted according to their biochemical properties. Since many **Campylobacter** toxins have been compared with toxins of other species, some key examples of the latter are also discussed. Future directions of toxin research that appear promising are defined.

coli VC167, cells producing antigenically different T1 and T2 flagella both serotyped as LIO8. We exploited the previously observed high degree of homology among campylobacter flagellin genes to move flagellin mutations from the VC167 background into other strains of C. jejuni and C. coli by natural transformation. Most mutants generated by transformation with VC167-B3, the flaA flaB deletion mutation, displayed a totally bald, **nonmotile** phenotype. The described antigenic variation of VC167 from T1 to T2 has not been explained at the molecular level, but clearly does not involve alternate expression of the flaA and flaB structural genes.

DESCRIPTORS: flagellin; structural analysis; molecular analysis; Campylobacter; flagella; genes; fla gene; antigens
SECTION HEADING: 02727 -- Amino acids, peptides and proteins; 02740 -- Genetics and evolution; 07321 -- General; 06008 -- Bacterial
?t s4/3,kwic/62 63 67
>>>KWIC option is not available in file(s): 41, 399

4/3,KWIC/62 (Item 1 from file: 654)
DIALOG(R)File 654:US PAT.FULL.
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02931670

Utility
CAMPYLOBACTERI JEJUNI FLAGELLIN-ESCHERICHIA COLI LT-B FUSION PROTEIN
[Antigenic fusion protein useful for decreasing colonization in chickens]

PATENT NO.: 5,888,810
ISSUED: March 30, 1999 (19990330)
INVENTOR(s): Meinersmann, Richard J., Lithonia, GA (Georgia), US (United States of America)
Khoury, Christian A., Philadelphia, PA (Pennsylvania), US (United States of America)
ASSIGNEE(s): The United States of America as represented by the Secretary of Agriculture, (A U.S. Government Agency), Washington, DC (District of Columbia, US (United States of America) [Assignee Code(s): 86512]
EXTRA INFO: Assignment transaction [Reassigned], recorded November 17, 2000 (20001117)
APPL. NO.: 8-784,218
FILED: January 16, 1997 (19970116)

This application is a division of application Ser. No. 08-150,305 filed Nov. 12, 1993, now abandoned.

FULL TEXT: 821 lines

CAMPYLOBACTERI JEJUNI FLAGELLIN-ESCHERICHIA COLI LT-B FUSION PROTEIN

... intestinal tract poorly. This occurred because the organisms were rapidly eliminated from the gut. The **nonmotile** flagellate colonized the gut as successfully as the wild type strain in some cases. These...

4/3,KWIC/63 (Item 2 from file: 654)
DIALOG(R)File 654:US PAT.FULL.
(c) format only 2001 The Dialog Corp. All rts. reserv.

02875091

Utility
CAMPYLOBACTER JEJUNI FLAGELLIN/ESCHERICHIA COLI LT-B FUSION PROTEIN
[Produced by Escherichia Coli cells that have been transformed by plasmid pBEB into which DNA sequences encoding the novel protein have been introduced; poultry vaccine]

PATENT NO.: 5,837,825
ISSUED: November 17, 1998 (19981117)
INVENTOR(s): Meinersmann, Richard J., Lithonia, GA (Georgia), US (United

States of America)
Khoury, Christian A., Philadelphia, PA (Pennsylvania), US (United States of America)
ASSIGNEE(s): The United States of America as represented by the Secretary of Agriculture, (A U.S. Government Agency), Washington, DC (District of Columbia, US (United States of America) [Assignee Code(s): 86512]
EXTRA INFO: Assignment transaction [Reassigned], recorded November 17, 2000 (20001117)
APPL. NO.: 8-829,026
FILED: March 31, 1997 (19970331)

This application is a continuation of application Ser. No. 08-150,305 filed Nov. 12, 1993, now abandoned.

FULL TEXT: 819 lines

CAMPYLOBACTER JEJUNI FLAGELLIN/ESCHERICHIA COLI LT-B FUSION PROTEIN

... intestinal tract poorly. This occurred because the organisms were rapidly eliminated from the gut. The **nonmotile** flagellate colonized the gut as successfully as the wild type strain in some cases. These...

4/3,KWIC/67 (Item 2 from file: 442)
DIALOG(R)File 442:AMA Journals

00013644

The Influence of Immunity on Raw Milk -- Associated Campylobacter **Infection** (ORIGINAL CONTRIBUTIONS)

BLASER, MARTIN J.; SAZIE, ELIZABETH; WILLIAMS, L. PAUL
JAMA, The Journal of the American Medical Association
January 2, 1987; 257: 43-46
LINE COUNT: 00249 WORD COUNT: 03443

The Influence of Immunity on Raw Milk -- Associated Campylobacter **Infection**
CITED REFERENCES:
...enteritis. Gastroenterology 1986;90:1217-1222.

32. Ahnen DJ, Brown WR: Campylobacter enteritis in immune-**deficient** patients. Ann Intern Med 1982;96:187-188.

33. Johnson RJ, Wang SP, Shelton WR...

```
et     Items   Description
S1         20   CAMPYLOBACTER?/TI AND AUTOIMMUN?/TI
S2         12   RD (unique items)
?t s2/9/2 3 4 8
```

2/9/2 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)
(c) format only 2001 Dialog Corporation. All rts. reserv.

08906860 96104356 PMID: 8544349
Campylobacter **jejuni and** autoimmune-**mediated neurologic diseases: pathogenesis of Guillain-Barre syndrome and Fisher's syndrome]**
Yuki N
Department of Biochemistry, Faculty of Medicine, Tokyo Medical and Dental University.
Nippon saikingaku zasshi (JAPAN) Oct 1995, 50 (4) p991-1003, ISSN 0021-4930 Journal Code: KHZ
Languages: JAPANESE
Document type: Journal Article; Review; Review, Tutorial
Record type: Completed
Subfile: INDEX MEDICUS
(41 Refs.)
Tags: Animal; Human
Descriptors: *Autoimmune Diseases--etiology--ET; *Campylobacter Infections--immunology--IM; *Campylobacter jejuni--immunology--IM; *Cerebellar Ataxia--etiology--ET; *Ophthalmoplegia--etiology--ET; *Polyradiculoneuropathy--etiology--ET; *Reflex, Abnormal; Autoantibodies--immunology--IM; Campylobacter Infections--complications--CO; Epitopes; Gangliosides--immunology--IM; Lipopolysaccharides--immunology--IM; Syndrome
CAS Registry No.: 0 (Autoantibodies); 0 (Epitopes); 0 (Gangliosides); 0 (Lipopolysaccharides)
Record Date Created: 19960214

2/9/3 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

09942380 BIOSIS NO.: 199598397298
Molecular mechanisms responsible for autoimmunity **induced by HSP43 of** Campylobacter **jejuni.**
BOOK TITLE: The 9th International Congress of Immunology
AUTHOR: Zang Xing-Xing; Ma Bao-Li; Wang Li; Bai Jun; Cao He-Nian
BOOK AUTHOR/EDITOR: 9TH INTERNATIONAL CONGRESS OF IMMUNOLOGY
AUTHOR ADDRESS: Shanghai Inst. Immunol., Shanghai Second Med. Univ., Shanghai 200025**China
p404 1995
BOOK PUBLISHER: 9th International Congress of Immunology, San Francisco, California, USA
CONFERENCE/MEETING: Meeting Sponsored by the American Association of Immunologists and the International Union of Immunological Societies San Francisco, California, USA July 23-29, 1995
RECORD TYPE: Citation
LANGUAGE: English
DESCRIPTORS:
MAJOR CONCEPTS: Blood and Lymphatics (Transport and Circulation); Genetics; Immune System (Chemical Coordination and Homeostasis); Infection; Physiology
BIOSYSTEMATIC NAMES: Aerobic Helical or Vibrioid Gram-Negatives--Eubacteria, Bacteria; Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: aerobic helical or vibrioid gram-negative bacteria (Aerobic Helical or Vibrioid Gram-Negatives); Campylobacter jejuni (Aerobic Helical or Vibrioid Gram-Negatives); Muridae (Muridae)
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): animals; bacteria; chordates; eubacteria; mammals; microorganisms; nonhuman mammals; nonhuman vertebrates; rodents; vertebrates

MISCELLANEOUS TERMS: AUTOANTIBODY; AUTOIMMUNE DISEASE; DNA; DOMINANT IMMUNOGENICITY; HEAT SHOCK PROTEIN 43; HEAT SHOCK PROTEIN 60; MEETING ABSTRACT; MOLECULAR MIMICRY; RNA

CONCEPT CODES:
03506 Genetics and Cytogenetics-Animal
15004 Blood, Blood-Forming Organs and Body Fluids-Blood Cell Studies
15008 Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and Reticuloendothelial System
31000 Physiology and Biochemistry of Bacteria
34504 Immunology and Immunochemistry-Bacterial, Viral and Fungal
34508 Immunology and Immunochemistry-Immunopathology, Tissue Immunology
36002 Medical and Clinical Microbiology-Bacteriology
00520 General Biology-Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals
02506 Cytology and Cytochemistry-Animal
10062 Biochemical Studies-Nucleic Acids, Purines and Pyrimidines
10064 Biochemical Studies-Proteins, Peptides and Amino Acids
10068 Biochemical Studies-Carbohydrates

BIOSYSTEMATIC CODES:
06210 Aerobic Helical or Vibrioid Gram-Negatives (1992-)
86375 Muridae

2/9/4 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

08972698 BIOSIS NO.: 199396124199
Suppression of polyglycosides of Tripterygium wilfordii Hook on autoimmunity **induced by** Campylobacter **jejuni.**
AUTHOR: Sun Bing; Ma Bao-Li; Xie Ya-Li
AUTHOR ADDRESS: Dep. Pharmacol., Sch. Pharm., Shanghai Med. Univ., Shanghai 200032**China
JOURNAL: Zhongguo Yaolixue Yu Dulixue Zazhi 7 (3):p190-192 1993
ISSN: 1000-3002
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: Chinese; Non-English
SUMMARY LANGUAGE: Chinese; English

ABSTRACT: Polyglycosides of Tripterygium wilfordii Hook (T-II, 20 mg cntdot kg-1 cntdot d-1 times 21 d, ig) treatment had a suppressive action on autoimmunity induced by Campylobacter jejuni infection. T-II inhibited the enhanced formation of PFC, anti-ds-DNA antibody and lymphocyte proliferation with and without concanavalin A in the infected mice, and rendered the increased ratio of L3T4+/Lyt2+ to normal. The results indicate that T-II can play an important role in treatment of autoimmune diseases by keeping the balance of the ratio of the L3T4+/Lyt2+.

DESCRIPTORS:
MAJOR CONCEPTS: Blood and Lymphatics (Transport and Circulation); Cell Biology; Immune System (Chemical Coordination and Homeostasis); Infection; Metabolism; Pathology; Pharmacology
BIOSYSTEMATIC NAMES: Aerobic Helical or Vibrioid Gram-Negatives--Eubacteria, Bacteria; Celastraceae--Dicotyledones, Angiospermae, Spermatophyta, Plantae; Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia; Micrococcaceae--Eubacteria, Bacteria; Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia; Pseudomonadaceae--Eubacteria, Bacteria
ORGANISMS: aerobic helical or vibrioid gram-negative bacteria (Aerobic Helical or Vibrioid Gram-Negatives); human (Hominidae); Celastraceae (Celastraceae); Muridae (Muridae); Pseudomonas aeruginosa (Pseudomonadaceae); Staphylococcus aureus (Micrococcaceae)
BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): angiosperms; animals; bacteria ; chordates; dicots; eubacteria; humans; mammals; microorganisms; nonhuman mammals; nonhuman vertebrates; plants; primates; rodents; spermatophytes; vascular plants; vertebrates

MISCELLANEOUS TERMS: CHILD; OTITIS MEDIA
CONCEPT CODES:
02506 Cytology and Cytochemistry-Animal
12512 Pathology, General and Miscellaneous-Therapy (1971-)
13004 Metabolism-Carbohydrates
13012 Metabolism-Proteins, Peptides and Amino Acids
15008 Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and Reticuloendothelial System
22018 Pharmacology-Immunological Processes and Allergy
34504 Immunology and Immunochemistry-Bacterial, Viral and Fungal
34508 Immunology and Immunochemistry-Immunopathology, Tissue Immunology
36002 Medical and Clinical Microbiology-Bacteriology
10060 Biochemical Studies-General
10064 Biochemical Studies-Proteins, Peptides and Amino Acids
10068 Biochemical Studies-Carbohydrates
15004 Blood, Blood-Forming Organs and Body Fluids-Blood Cell Studies
51522 Plant Physiology, Biochemistry and Biophysics-Chemical Constituents
54000 Pharmacognosy and Pharmaceutical Botany
BIOSYSTEMATIC CODES:
06210 Aerobic Helical or Vibrioid Gram-Negatives (1992-)
25775 Celastraceae
86375 Muridae

2/9/8 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

04163175 JICST ACCESSION NUMBER: 99A0394824 FILE SEGMENT: JICST-E
New Aspects of Infectious Diseases and Their Treatments-Bacterial Infectious Diseases. Campylobacter **jejuni Enteritis and** Autoimmune **Neurological Disorders.**
KOGA MICHIAKI (1); YUKI NOBUHIRO (1)
(1) Dokkyo Univ. Sch. of Med.
Saishin Igaku, 1999, VOL.54,3gatsu zokango, PAGE.594-601, TBL.3, REF.11
JOURNAL NUMBER: Z0358AAR ISSN NO: 0370-8241 CODEN: SAIGA
UNIVERSAL DECIMAL CLASSIFICATION: 616.3 616.83/.89
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Commentary
MEDIA TYPE: Printed Publication
DESCRIPTORS: Campylobacter jejuni; bacterial infection(disease); enteritis; Guillain-Barre syndrome; ganglioside; autoantibody; human(primates)
BROADER DESCRIPTORS: Campylobacter; spiral and curved bacteria; bacterium; microorganism; infectious disease; disease; inflammation; intestinal disease; gastrointestinal disease; digestive system disease; neuritis; peripheral nerve disease; nervous system disease; paralytic disease; sphingoglycolipid; sphingolipid; complex lipid; lipid; glycolipid; isoantibody; antibody
CLASSIFICATION CODE(S): GH03000W; GN03000O
?t s2/7/9 10 11

2/7/9 (Item 1 from file: 167)
DIALOG(R)File 167:Medical Device Register (R)

00010259 47281

QUIDEL CORPORATION
10165 McKellar Ct.
San Diego, CA 92121-4299
United States

TELEPHONE: 619-552-1100 ;800-874-1517
FAX: 619-546-8955
CONTACT: Jik McNemany / Dir. Mktg.

TICKER SYMBOL: QDEL
STOCK EXCHANGE: NASDAQ

PRODUCT NAME -- MEDICAL SPECIALTY NAME -- NOTES
Test, Disease, Lyme -- IMMUNOLOGY -- QUIDEL lyme disease test.
Test, Allergy -- IMMUNOLOGY -- Allergy screen allergy test.
Test, Fertility Monitoring -- OBSTETRICS/GYN -- CONCEIVE $29.95/OVUQUICK. One-step urine assay.
Chlamydia Trachomatis -- MICROBIOLOGY
Antibody, Monoclonal -- MICROBIOLOGY -- MAb/enzyme immunoassy dipsticks.
Kit, Pregnancy Test -- OBSTETRICS/GYN -- CONCEIVE one-step urine assay.
Test, Infectious Mononucleosis -- IMMUNOLOGY
Test, Human Chorionic Gonadotropin -- IMMUNOLOGY
Antiserum, Streptococcus SPP. -- MICROBIOLOGY -- Group B strep test.
Antigen, Streptococcus SPP. -- MICROBIOLOGY -- Group A Strep stest.
Antigen, Antiserum, Control, Luteinizing Hormone -- IMMUNOLOGY -- Ovulation prediction test.
Campylobacter Pylori -- MICROBIOLOGY -- $110.00 for 10-test set of QUICKVUE ELISA-based rapid detection test of Helicobacter pylori.
Test, Antibiotic Susceptibility -- MICROBIOLOGY -- QUIDEL **autoimmune** disorder test kits.

2/7/10 (Item 2 from file: 167)
DIALOG(R)File 167:Medical Device Register (R)

00008051 27019

HYCOR BIOMEDICAL INC.
18800 Von Karman Ave.
Irvine, CA 92612-1517
United States

TELEPHONE: 949-440-2000
FAX: 949-440-2220
CONTACT: Richard D. Hamill / COB & President
TICKER SYMBOL: HYBD
STOCK EXCHANGE: NASDAQ

PRODUCT NAME -- MEDICAL SPECIALTY NAME -- NOTES
Test, Radio-Allergen Absorbent (RAST) -- IMMUNOLOGY
Control, Urinalysis (Assayed And Unassayed) -- CHEMISTRY
Control, Drug Specific -- TOXICOLOGY -- Urine.
Campylobacter Pylori -- MICROBIOLOGY -- Helicobacter. PYLORAGEN enzyme immunoassay test for clinical lab detection of Helicobacter pylori.
Test, Allergy -- IMMUNOLOGY -- Automate instrument system for allergy (Specific Ig E) and **Autoimmune** Disease.

2/7/11 (Item 1 from file: 77)
DIALOG(R)File 77:Conference Papers Index

4000379
Supplier Accession Number: 93020258 V21N03
Role of 67 kD outer membrane protein of Campylobacter jejuni in inducing autoimmunity
Ma, B.L.; Xia, W.L.; Gao, J.X.
8th International Congress of Immunology 9230119 Budapest (Hungary) 23-28 Aug 1992
International Union of Immunological Societies
Springer-Verlag, Budapest, Wesselenyi, utca 28, H-1075, Hungary
Languages: ENGLISH

Suppression of polyglycosides of Tripterygium wilfordii Hook on autoimmunity induced by Campylobacter jejuni.

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JOURNAL: Zhongguo Yaolixue Yu Dulixue Zazhi 7 (3):p190-192 1993
ISSN: 1000-3002
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: Chinese; Non-English
SUMMARY LANGUAGE: Chinese; English

ABSTRACT: Polyglycosides of Tripterygium wilfordii Hook (T-II, 20 mg cntdot kg-1 cntdot d-1 times 21 d, ig) treatment had a suppressive action on autoimmunity induced by Campylobacter jejuni infection. T-II inhibited the enhanced formation of PFC, anti-ds-DNA antibody and lymphocyte proliferation with and without concanavalin A in the infected mice, and rendered the increased ratio of L3T4+/Lyt2+ to normal. The results indicate that T-II can play an important role in treatment of autoimmune diseases by keeping the balance of the ratio of the L3T4+/Lyt2+.

Intravenous immunoglobulin treatment in children with Guillain-Barre syndrome.

Kanra G; Ozon A; Vajsar J; Castagna L; Secmeer G; Topaloglu H
Hacettepe University Children's Hospital, Ankara, Turkey.

European journal of paediatric neurology (ENGLAND) 1997, 1 (1) p7-12 , ISSN 1090-3798 Journal Code: DGS
Comment in Europ J Paediatr Neurol. 1997 ;1(1) 3-5; Comment in Europ J Paediatr Neurol. 1998 ;2(1):57-9
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Subfile: INDEX MEDICUS

We have retrospectively reviewed the data of 75 consecutive children diagnosed with Guillain-Barre syndrome (GBS) and hospitalized in two centres. There were 51 children with GBS treated in Ankara, Turkey and 24 patients treated in Toronto, Canada. To evaluate the effect of intravenous immunoglobulin (IVIG) treatment, the patients were divided into three groups. All 24 Canadian patients received IVIG in a dose of 1 g/kg/day for 2 days. In the Ankara group 23 children received 0.4 g/kg/day for 5 days and the remaining 28 patients in that group received supportive treatment only. In all but two patients IVIG was started within the first 2 weeks of neuropathic symptoms. The patients' data, including mean functional grades, frequency of bulbar signs and autonomic dysfunction and age were similar in all three groups. Analysis of the short-term outcome demonstrated that the patients treated with IVIG had a significantly faster rate of recovery. Mean time-lapse until improvement of one functional grade was 17.4 days in the IVIG group from Toronto, and 20.8 days in the IVIG group and 62.4 days in the non-IVIG group of patients from Ankara. We conclude that IVIG has considerable efficacy in the treatment of children with GBS. Furthermore, we have also demonstrated a faster rate of recovery in patients who received a total dose of IVIG in 2 days as opposed to 5 days.

Tags: Comparative Study; Female; Human; Male

Current treatment in acute demyelinating polyneuropathy (Guillain-Barre syndrome)

Shorer Z

European journal of paediatric neurology (ENGLAND) 1997, 1 (1) p3-5, ISSN 1090-3798 Journal Code: DGS
Comment on Europ J Paediatr Neurol. 1997 ;1(1) 7-12
Languages: ENGLISH
Document type: Comment; Editorial
Record type: Completed
Subfile: INDEX MEDICUS
Tags: Human
Descriptors: **Guillain-Barre Syndrome** --therapy--TH; ***Immunization , Passive** ; Child; Treatment Outcome
Record Date Created: 20000412

Guillain-Barre syndrome (idiopathic polyneuritis) and experimental allergic neuritis. A comparison

Ishihara Y.
Dept. Pathol. Neuropathol., Tokyo Metrop. Inst. Neurosci., Tokyo 183 Japan

Advances in Neurological Sciences (ADV. NEUROL. SCI.) (Japan) 1980, 24/1 (139-156)
CODEN: SKNSA
DOCUMENT TYPE: Journal
LANGUAGE: JAPANESE SUMMARY LANGUAGE: ENGLISH

The Guillain-Barre-Strohl syndrome (GBS) is an acute paralytic disease of unknown etiology (idiopathic polyradiculoneuritis). This paralytic condition of the peripheral nervous system (PNS) is characterized by intense lymphocytic infiltration throughout the PNS, including cranial nerves, spinal roots, spinal ganglia and even autonomous peripheral nerves. The inflammatory response is perivenural in nature and actively provoked the demyelination corresponding to the foci of cellular infiltration, consequently being classified and inflammatory polyradiculoneuritis or a demyelinating disease of the PNS. GBS is a clinical entity, designated with the first clear description by Guillain, Barre, and Strohl (1916). The disorder is commonly present in antecedent acute infectious diseases, such as upper respiratory illnesses, often described as influenza-like, and digestive disturbance, with diarrhea. There is some evidence of aberrant **immune** responses and of **passive** irritance in the individual **immune** system, for instance, a GBS-like paralysis has occurred in persons after surgical treatment, some after vaccinization, and followed a definite viral infection. Postvaccination paralysis, especially in antirabies vaccinization, has evoked severe paralytic accidents in both CNS and PNS, in well known postvaccination encephalomyelitis and peripheral neuritis (Adaros and Held, 1971). Experimental allergic encephalomyelitis (EAE) provided a satisfactory model of these artificial demyelinating diseases, CNS-tissue antigens. Experimental allergic neuritis (EAN) is also produced by inoculation of peripheral nerve emulsions with Freund's complete adjuvant (FCA) as an analogy of EAE, first reported by Waksman and Adams (1955). EAN is a paralytic condition of peripheral nerves, clinically marks a muscular weakness, total limb paralysis, extended flat posture, etc., and a few days after onset paralysis usually reaches its maximum expression. The pathology of EAN is well established. The underlying mechanisms in immune response and allergic demyelination of EAN or GBS are not clearly known, though several possibilities may be considered. The many evidences of close correspondence between EAN animal disease and human Guillain-Barre syndrome should encourage continued immunopathological studies on this suitable model to solve the human demyelinating diseases.

Guillain-Barre syndrome (idiopathic polyneuritis) and experimental allergic neuritis. A comparison

Ishihara Y.
Dept. Pathol. Neuropathol., Tokyo Metrop. Inst. Neurosci., Tokyo 183 Japan

Advances in Neurological Sciences (ADV. NEUROL. SCI.) (Japan) 1980, 24/1 (139-156)
CODEN: SKNSA
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The Guillain-Barre-Strohl syndrome (GBS) is an acute paralytic disease of unknown etiology (idiopathic polyradiculoneuritis). This paralytic condition of the peripheral nervous system (PNS) is characterized by intense lymphocytic infiltration throughout the PNS, including cranial nerves, spinal roots, spinal ganglia and even autonomous peripheral nerves. The inflammatory response is perivenural in nature and actively provoked the demyelination corresponding to the foci of cellular infiltration, consequently being classified and inflammatory polyradiculoneuritis or a demyelinating disease of the PNS. GBS is a clinical entity, designated with the first clear description by Guillain, Barre, and Strohl (1916). The disorder is commonly present in antecedent acute infectious diseases, such as upper respiratory illnesses, often described as influenza-like, and digestive disturbance, with diarrhea. There is some evidence of aberrant **immune** responses and of **passive** irritance in the individual **immune** system, for instance, a GBS-like paralysis has occurred in persons after surgical treatment, some after vaccinization, and followed a definite viral infection. Postvaccination paralysis, especially in antirabies vaccinization, has evoked severe paralytic accidents in both CNS and PNS, in well known postvaccination encephalomyelitis and peripheral neuritis (Adaros and Held, 1971). Experimental allergic encephalomyelitis (EAE) provided a satisfactory model of these artificial demyelinating diseases, CNS-tissue antigens. Experimental allergic neuritis (EAN) is also produced by inoculation of peripheral nerve emulsions with Freund's complete adjuvant (FCA) as an analogy of EAE, first reported by Waksman and Adams (1955). EAN is a paralytic condition of peripheral nerves, clinically marks a muscular weakness, total limb paralysis, extended flat posture, etc., and a few days after onset paralysis usually reaches its maximum expression. The pathology of EAN is well established. The underlying mechanisms in immune response and allergic demyelination of EAN or GBS are not clearly known, though several possibilities may be considered. The many evidences of close correspondence between EAN animal disease and human Guillain-Barre syndrome should encourage continued immunopathological studies on this suitable model to solve the human demyelinating diseases.

Acute idiopathic demyelinating polyneuropathy: Passive transfer to mice by immunoglobulin

Dalkara T.; Onur R.; Subutay N.; Unol B.; Kucukali T.; Erbengis T.; Zileli T.

Department of Neurology, Faculty of Medicine, Hacettepe University, Ankara Turkey

NeuroReport (NEUROREPORT) (United Kingdom) 1990, 1/2 (145-148)
CODEN: NERPE ISSN: 0959-4965
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Systemic administration of acute idiopathic demyelinating polyneuropathy (AIDP) immunoglobulins to mice for two weeks resulted in reduced sural nerve action potential amplitudes and reduced (rotarod) motor performance. Electron microscopic examination of the sciatic nerves of the AIDP-immunoglobulin-treated animals revealed loosening of myelin lamellae with widening of interperiod lines and multivesicular disruption of myelin. Vacuolar degeneration was detected in half of the nerves examined by light microscopy. Injection of AIDP-immunoglobulins for three days led to only minor changes, and mice receiving healthy human immunoglobulins showed no abnormalities. These data show that some features of AIDP can be transferred to mice by systemic administration of immunoglobulins and suggest that humoral factors a pathogenic role in AIDP in addition to cellular factors.

Pathogenic antibodies in women with obstetric features of antiphospholipid syndrome who have negative test results for lupus anticoagulant and anticardiolipin antibodies

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Dr. R.M. Silver, Dept. of Obstetrics and Gynecology, Univ. of Utah School of Medicine, 50 N. Medical Dr., Salt Lake City, UT 84132 United States

American Journal of Obstetrics and Gynecology (AM. J. OBSTET. GYNECOL.) (United States) 1997, 176/3 (628-633)

CODEN: AJOGA ISSN: 0002-9378

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 19

OBJECTIVE: Our goal was to determine whether women with clinical features of antiphospholipid syndrome but negative test results for lupus anticoagulant and anticardiolipin antibodies have pathogenic antibodies not identified by currently used methods. STUDY DESIGN: Sera were obtained from women with clinical features associated with antiphospholipid antibodies who had negative test results for lupus anticoagulant and anticardiolipin antibodies (antiphospholipid syndrome-like). We studied (1) the effect of **passive immunization** with their purified immunoglobulin G fraction on murine pregnancy (n = 35) and (2) the presence of antiphospholipid antibodies other than lupus anticoagulant or anticardiolipin antibodies (n = 39). Sera were also retested for anticardiolipin antibodies and lupus anticoagulant. RESULTS: Fetal loss occurred in 235 of 1088 (22%) pups in 137 mice immunized with immununoglobulin G fraction from antiphospholipid syndrome-like women compared with 23 of 402 (6%) pups in 53 control mice. Immunoglobulin G from 11 study patients resulted in the loss of at least one third of the exposed pups. Five women had positive levels of antiphosphatidylserine antibodies (>99th percentile). All levels were low positive, and three women also had low-positive levels of anticardiolipin antibodies on repeat testing. Five of the 11 (45%) women whose immunoglobulin G fractions caused at least 33% fetal loss also had positive test results for antiphospholipid antibodies. CONCLUSIONS: A subset of women with clinical disorders suspicious for antiphospholipid syndrome but who had negative test results for lupus anticoagulant and anticardiolipin antibodies by current methods have serum immunoglobulin G that is pathogenic to murine pregnancy. Testing for pathogenic immunoglobulin G may provide additional means to identify women with an as yet uncharacterized immune condition. The clinical relevance of low levels of antiphospholipid antibodies in these women remains unproved.

Neurological complications of immunization

Reik L. Jr.
L. Reik Jr., Department of Neurology, Univ. of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-1840 United States

Neurological Infections and Epidemology (NEUROL. INFECT. EPIDEMIOL.) (United Kingdom) 1997, 2/2 (69-98)
CODEN: NIEPF ISSN: 1084-4759
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 349

Neurological complications are among the most serious side effects of immunizations and vaccinations. A number of different reactions can occur depending on the type of vaccine given. **Passive immunization** , most often with heterologous serum, results in the multifocal vasculopathic neurological abnormalities of serum sickness. Active immunization with toxoids, inactivated whole cell and subunit vaccines, and with some live attenuated vaccines, induces various central and peripheral nervous system abnormalities that seem to share a common pathogenesis involving the immune system. These include acute disseminated encephalomyelitis, acute toxic encephalopathy, acute hemorrhagic leukoencephalitis, acute transverse myelitis, acute cerebellar ataxia, optic neuritis, brachial plexus neuritis, the Guillain- Barre syndrome, and various cranial and peripheral mononeuropathies. Active immunization with other live attenuated virus vaccines causes direct nervous system infection with the vaccine virus itself. Important examples include the oral polio, mumps, and yellow fever vaccines.

Title: Treatment of neurological disorders with intravenous immunoglobulin.
Author(s): Loscher WN; Fettweis R; Huemer M; Iglseder B; Trinka E; Ladurner G
Corporate Source: LANDESNERVENKLIN,NEUROL ABT/SALZBURG//AUSTRIA/
Journal: NEUROPSYCHIATRIE, 1997, V11, N4, P161-167
Publication date: 19970000
Publisher: DUSTRI-VERLAG DR KARL FEISTLE, BAHNHOFSTRABE 9 POSTFACH 49, W-8024 MUNCHEN-DEISENHOFEN, GERMANY
Language: German Document Type: REVIEW
Geographic Location: AUSTRIA
Journal Subject Category: NEUROSCIENCES; PSYCHIATRY
Abstract: Several diseases of the central and peripheral nervous system are based upon deficits of the immune system. The treatment of these diseases predominately rested upon steroids, immunosuppressive medication and plasmapheresis, all being effective to various degrees only. Furthermore, these treatments may be accompanied by severe complications and adverse effects. During the last decade, intravenous immunoglobulins have frequently been used as an alternative means to treat immunologically mediated diseases of the nervous system. Immunoglobulins have been shown to act upon several stages of the **immune** response, and, besides a **passive** transfer of anti-idiotypic antibodies, appear to be able to alter the immune response in a more general way. Furthermore, evidence is accumulating that immunoglobulins promote remyelination within the central nervous system, This review intends to critically discuss the use of intravenous immunoglobulins in the treatment of acute inflammatory polyradiculoneuritis, chronic inflammatory polyneuropathy, multifocal motor-neuropathy with conduction block, inflammatory myopathies, myasthenia gravis, Lambert-Eaton syndrome, multiple sclerosis and epilepsy.
Descriptors--Author Keywords: autoimmune disease ; demyelination ; immunoglobulin
Identifiers--KeyWord Plus(R): INFLAMMATORY DEMYELINATING POLYNEUROPATHY; MULTIFOCAL MOTOR NEUROPATHY; **GUILLAIN-BARRE-SYNDROME**; INCLUSION-BODY MYOSITIS; IMMUNE GLOBULIN; DOUBLE-BLIND; MULTIPLE-SCLEROSIS; MYASTHENIA-GRAVIS; PLASMA-EXCHANGE; GAMMA-GLOBULIN
Cited References:

Isotype, specificity, and kinetics of systemic and mucosal antibodies **to** Campylobacter **jejuni antigens, including flagellin, during experimental oral infections of chickens.**

Cawthraw S; Ayling R; Nuijten P; Wassenaar T; Newell DG

Central Veterinary Laboratory (Weybridge), New Haw, Addlestone, Surrey, United Kingdom.

Avian diseases (UNITED STATES) Apr-Jun 1994, 38 (2) p341-9, ISSN 0005-2086 Journal Code: 9IY

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

The immune response of chickens to Campylobacter jejuni infection was studied as a step in the search for vaccine candidates. One-day-old chicks orally challenged with C. jejuni strain 81116 showed significant increases in specific IgG, IgA, and IgM circulating antibodies, as detected by enzyme-linked immunosorbent assay (ELISA). These levels peaked at 9, 5, and 7 weeks postinfection, respectively. Maternal IgG antibodies were also detected over the first 2 weeks. Specific mucosal IgG and IgA antibody levels also increased significantly. All of the birds demonstrated a major response to the 62-kDa flagellin protein by Western blotting techniques. The immunodominance of flagellin was confirmed by ELISA using an antigen preparation from an **aflagellate** mutant. When overlapping recombinant polypeptide fragments of flagellin were used, epitopes detected by chicken antibodies were observed in region IV, between residues 95-340 of the protein. Thus flagellin may be suitable candidate for a vaccine, although its role in protection must first be established.

Tags: Animal; Support, Non-U.S. Gov't

Descriptors: *Antibodies, Bacterial--biosynthesis--BI; *Antigens, Bacterial--immunology--IM; *Campylobacter Infections--immunology--IM; *Campylobacter jejuni--immunology--IM; *Flagellin--immunology--IM; *IgG --biosynthesis--BI; *Immunoglobulin Isotypes--biosynthesis--BI; *Intestinal Mucosa--immunology--IM; Antibodies, Bacterial--blood--BL; Antibodies, Bacterial--classification--CL; Antibody Specificity; Blotting, Western; Chickens; Enzyme-Linked Immunosorbent Assay; Epitopes--analysis--AN; IgG --blood--BL; IgG--classification--CL; Immunoglobulin Isotypes --classification--CL

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Antigens, Bacterial); 0 (Epitopes); 0 (IgG); 0 (Immunoglobulin Isotypes); 12777-81-0 (Flagellin)

Record Date Created: 19941129

2/9/2 (Item 2 from file: 155)

05513028 86197665 PMID: 2422256

Monoclonal antibodies **directed against the flagella of** Campylobacter **jejuni: production, characterization and lack of effect on the colonization of infant mice.**

Newell DG

Journal of hygiene (ENGLAND) Apr 1986, 96 (2) p131-41, ISSN 0022-1724 Journal Code: IEF

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

Eight monoclonal antibodies have been derived from Balb/c mice hyperimmunized with the purified flagella from Campylobacter jejuni strain 81116. These monoclonal antibodies are directed against flagella as demonstrated by reaction in ELISA against flagellate and **aflagellate** antigens, radio-immunoprecipitation and electro-immunoblotting techniques. Some of the antibodies react with a 60K minor protein as well as the 62K flagella protein. This protein may be related to an antigen expressed on the surface of the organism and detectable by immunogold labelling with one of the monoclonal antibodies. None of the antibodies causes the aggregation

of bacteria or inhibits bacterial motility, unlike polyclonal anti-flagella antiserum. Moreover, none of the antibodies tested protected infant mice from colonization with C. jejuni strain 81116 even though partial protection (28%) was observed with syngeneic anti-flagella anti-serum. Absence of protection is probably due to the cryptic nature of the flagella epitopes investigated or lack of antibody activity in the gastrointestinal tract.

Tags: Animal

Descriptors: *Animals, Newborn--microbiology--MI; *Antibodies, Monoclonal ; *Campylobacter fetus--immunology--IM; *Flagella--immunology--IM; Enzyme-Linked Immunosorbent Assay; Epitopes--analysis--AN; Gold; Immunization, Passive; Mice; Mice, Inbred BALB C; Movement

CAS Registry No.: 0 (Antibodies, Monoclonal); 0 (Epitopes); 7440-57-5 (Gold)

Record Date Created: 19860603

2/9/3 (Item 1 from file: 5)

05688408 BIOSIS NO.: 000084036813

INTESTINAL MUCUS GEL AND SECRETORY ANTIBODY **ARE BARRIERS TO** CAMPYLOBACTER-**JEJUNI ADHERENCE TO INT 407 CELLS**

AUTHOR: MCSWEEGAN E; BURR D H; WALKER R I
AUTHOR ADDRESS: NAVAL MED. RES. INST., BETHESDA, MD. 20814.

JOURNAL: INFECT IMMUN 55 (6). 1987. 1431-1435. 1987
FULL JOURNAL NAME: Infection and Immunity
CODEN: INFIB
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: An in vitro mucus assay was developed to study the role of mucus gel and secretory immunoglobulin A (sIgA) in preventing attachment of Campylobacter jejuni to INT 407 cells. An overlay of rabbit small intestinal mucus was found to impede the attachment of C. jejuni to a monolayer of INT 407 cells. Mucus from rabbits previously colonized with C. jejuni was found to completely inhibit bacterial adherence to the underlying cells. Anti-Campylobacter sIgA was readily detected in mucus samples from previously exposed rabbits and was responsible for eliminating bacterial adherence to the INT 407 cells. This was shown by loss of inhibition after mucus absorption with Campylobacter cells. sIgA-containing mucus caused aggregation of the C. jejuni cells within the mucus layer of the assay system. Nonimmune mucus and sIgA alone were unable to cause bacterial aggregation, suggesting a cooperative role for mucus and sIgA. Antibodies responsible for adhesion inhibition were cross-reactive among several Campylobacter strains and were not directed solely against flagellar antigens.

DESCRIPTORS: RABBIT STRAIN CROSS-REACTIVE ANTIBODY **NONFLAGELLAR** ANTIGEN FLAGELLAR ANTIGEN

CONCEPT CODES:
02506 Cytology and Cytochemistry-Animal
14004 Digestive System-Physiology and Biochemistry
14006 Digestive System-Pathology
30500 Morphology and Cytology of Bacteria
34504 Immunology and Immunochemistry-Bacterial, Viral and Fungal
36002 Medical and Clinical Microbiology-Bacteriology
10064 Biochemical Studies-Proteins, Peptides and Amino Acids

BIOSYSTEMATIC CODES:
04610 Spirillaceae (1979-)
86040 Leporidae

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA):
Microorganisms
Bacteria
Animals
Chordates

Vertebrates
Nonhuman Vertebrates
Mammals
Nonhuman Mammals
Lagomorphs

Epidemiological and clinical aspects of Campylobacter **infection in children. Local experience during 4 years at Bordeaux**

ASPECTS EPIDEMIOLOGIQUES ET CLINIQUES DE L'INFECTION A **CAMPYLOBACTER** CHEZ L'ENFANT. EXPERIENCE A BORDEAUX SUR 4 ANNEES

Sarlangue J.; Megraud F.
Hopital des Enfants, 168 Cours de l'Argonne, F-33000 Bordeaux France

Medecine et Maladies Infectieuses (MED. MAL. INFECT.) (France) 1991, 21/SPEC. ISS. OCT. (613-615)
CODEN: MMAIB ISSN: 0399-077X
DOCUMENT TYPE: Journal; Conference Paper
LANGUAGE: FRENCH SUMMARY LANGUAGE: FRENCH; ENGLISH

The campylobacters are now regarded as one of the principal causes of bacterial intestinal tract infections, with an incidence quite similar those due to Salmonella. It is a mainly pediatric infection, which affects mostly boys (60%), the infant less than 1 year of age (25% of cases) and is usually sporadic. C. jejuni (75%) or C. coli (16%) are the most commonly involved; a higher incidence of septicemia is noted with the other more rarely isolated species. Clinical signs are mostly of digestive origin, represented principally by diarrhoea in almost all cases, associated to severe abdominal pain in the child and bloody stools especially in infants in half of cases. Infection is usually mild with a benign course lasting one week. Systemic infection or visceral involvement are rare, occuring mostly in neonates or immuno-**deficient** patients. C. jejuni can be responsible for Guillain-Barre Syndrome or hemolytic uremic syndrome. Macrolids, the most commonly used antibiotics, are rarely indicated.

Oral administration of antibodies as prophylaxis and therapy in Campylobacter **jejuni-infected chickens.**

Tsubokura K; Berndtson E; Bogstedt A; Kaijser B; Kim M; Ozeki M; Hammarstrom L

Department of Clinical Immunology, Huddinge Hospital, Sweden.

Clinical and experimental immunology (ENGLAND) Jun 1997, 108 (3) p451-5, ISSN 0009-9104 Journal Code: DD7

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

Passive immunity against gastrointestinal infections has recently been successfully applied as prophylaxis and therapy in patients in a variety of virally and bacterially induced infections. Campylobacter jejuni is frequently associated with acute diarrhoea in humans, and several species of animals have been shown to transmit the disease, although birds have been implicated as the main source of infection. We used bovine and chicken immunoglobulin preparations from the milk and eggs, respectively, of immunized animals for prophylactic and therapeutic treatment of chickens infected with C. jejuni. A marked prophylactic effect (a >99% decrease in the number of bacteria) was noted using either antibody preparation, whereas the therapeutic efficacy, i.e. when antibodies were given after the infection was established, was distinctly lower (80-95%) as judged by faecal bacterial counts. These observations may serve as a starting point for experiments aimed at elimination of the infection in an industrial or farm setting. It may also encourage future attempts to treat, prophylactically or therapeutically, patients with Campylobacter-induced diarrhoea.

Influence of antibody treatment of Campylobacter **jejuni on the dose required to colonize chicks.**

Stern NJ; Meinersmann RJ; Dickerson HW

Poultry Microbiological Safety Research Unit, Richard B. Russell Agricultural Research Center, USDA-Agricultural Research Service, Athens, Georgia 30613.

Avian diseases (UNITED STATES) Jul-Sep 1990, 34 (3) p595-601, ISSN 0005-2086 Journal Code: 9IY

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

This study was designed to clarify the role of antibodies in controlling chicken colonization by Campylobacter jejuni. Cecal colonization by C. jejuni was compared after the organism was exposed either to phosphate-buffered saline, normal rabbit serum, rabbit hyperimmune anti-C. jejuni serum, or anti-C. jejuni antibodies extracted from chicken bile. Antibodies from chicken bile were extracted by affinity absorption against outer-membrane proteins from the challenge organism. Sera were heated 1 hour at 56 C to destroy complement activity. Bacterial inoculum levels were enumerated after 1 hour exposure at 4 C to the various treatments. The heated sera and the bile antibodies were not bactericidal, and bacterial agglutination was not evident. Serial dilutions of the antibody-treated C. jejuni were given by gavage into 1-day-old chicks. Six days later, the ceca were removed from the chicks, and samples were cultured on Campylobacter-charcoal differential agar. The colonization dose-50% was increased by twofold to 160-fold when the organism was preincubated with hyperimmune antiserum or the bile antibodies as compared with preincubation with phosphate-buffered saline. We conclude that antibodies inhibit chicken cecal colonization by C. jejuni.

Use of an immunoglobulin M containing preparation for treatment of two hypogammaglobulinemic patients with persistent Campylobacter **jejuni infection.**

Borleffs JC; Schellekens JF; Brouwer E; Rozenberg-Arska M

Department of Internal Medicine, University Hospital Utrecht, The Netherlands.

European journal of clinical microbiology & infectious diseases (GERMANY) Oct 1993, 12 (10) p772-5, ISSN 0934-9723 Journal Code: EM5

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

This report describes two hypogammaglobulinemic patients with persistent Campylobacter jejuni infections in spite of IgG substitution and antibiotic therapy. Since serum bactericidal activity (SBA) depends on IgM, these patients were each treated with six doses of an IgM-containing immunoglobulin preparation (Pentaglobin) at three-week intervals. During IgG therapy SBA was not seen in either patient. However, one hour following administration of the IgM preparation, SBA increased to 90%. Just before the next dose SBA was still at the 30-70% level. Both patients tolerated the therapy very well and there were no culture-confirmed relapses of Campylobacter jejuni infection. The IgM preparation may therefore be a useful alternative to conventional IgG in the treatment of hypogammaglobulinemic patients with persistent Campylobacter jejuni infection.

Campylobacter jejuni bacteremia and Guillain-Barre syndrome in a renal transplant recipient

Author(s): Maccario M (REPRINT) ; Tarantino A; NobileOrazio E; Ponticelli C
Corporate Source: OSPED MAGGIORE,DIV NEPHROL & DIALYSIS, IRCCS, VIA COMMENDA 15/I-20122 MILAN//ITALY/ (REPRINT)
Journal: TRANSPLANT INTERNATIONAL, 1998, V11, N6 (NOV), P439-442
ISSN: 0934-0874 Publication date: 19981100
Publisher: SPRINGER VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010
Language: English Document Type: ARTICLE
Geographic Location: ITALY
Subfile: CC CLIN--Current Contents, Clinical Medicine;
Journal Subject Category: SURGERY; TRANSPLANTATION
Abstract: In patients who have not undergone transplantation, Guillain-Barre syndrome (GBS) is typically preceded by an acute infection often sustained by Campylobacter jejuni. Thus far, in renal transplant recipients, only eight cases of GBS have been reported. In seven patients GBS was attributed to cytomeealovirus infection and in the eighth patient to cyclosporin A neurotoxicity. We report here the case of a GBS in a renal transplant recipient following C.jejuni bacteremia. The infection quickly disappeared after erythromycin and methronidazole therapy. GBS progressively evolved into a paraparesis within week. After reaching a plateau phase, the clinical status improved and the patient was able to walk unassisted after 3 weeks. At his last check-up, 54 months later, the patient was doing well with a functioning graft and only minimal weakness of the lower limbs.
Descriptors--Author Keywords: **Guillain-Barre syndrome**, **Campylobacter jejuni**, **renal transplantation**

Suppression of polyglycosides of Tripterygium wilfordii Hook on autoimmunity induced by Campylobacter jejuni.

AUTHOR: Sun Bing; Ma Bao-Li; Xie Ya-Li
AUTHOR ADDRESS: Dep. Pharmacol., Sch. Pharm., Shanghai Med. Univ., Shanghai 200032**China

JOURNAL: Zhongguo Yaolixue Yu Dulixue Zazhi 7 (3):p190-192 1993
ISSN: 1000-3002
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: Chinese; Non-English
SUMMARY LANGUAGE: Chinese; English

ABSTRACT: Polyglycosides of Tripterygium wilfordii Hook (T-II, 20 mg cntdot kg-1 cntdot d-1 times 21 d, ig) treatment had a suppressive action on autoimmunity induced by Campylobacter jejuni infection. T-II inhibited the enhanced formation of PFC, anti-ds-DNA antibody and lymphocyte proliferation with and without concanavalin A in the infected mice, and rendered the increased ratio of L3T4+/Lyt2+ to normal. The results indicate that T-II can play an important role in treatment of autoimmune diseases by keeping the balance of the ratio of the L3T4+/Lyt2+.

Surface array protein of Campylobacter **fetus. Cloning and gene structure.**

Blaser MJ ; Gotschlich EC

Laboratory for Bacteriology and Immunology, Rockefeller University, New York, New York 10021.

Journal of biological chemistry (UNITED STATES) Aug 25 1990, 265 (24) p14529-35, ISSN 0021-9258 Journal Code: HIV

Contract/Grant No.: AI 10615, AI, NIAID; AI 24145, AI, NIAID

Erratum in J Biol Chem 1990 Nov 5;265(31) 19372

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: INDEX MEDICUS

The high molecular mass (97-149 **kDa**) surface array proteins (SAP) of **Campylobacter** fetus are critical to virulence. We created a bank of 160,000 random 1.0-6.5-kilobase (kb) chromosomal DNA fragments of C. fetus strain 84-32 (23D) using lambda gt11. Screening this bank in Escherichia coli Y1090 with **antibody** raised against purified SAP permitted isolation and purification of a clone with a 4.0-kb insert. Subcloning this insert in the E. coli vector, pUC9, permitted expression of a protein of approximately 100 **kDa** , not fused with beta-galactoside or inducible by isopropyl-beta-D-thiogalactopyranoside. Digestion with restriction endonucleases, and construction of deletion mutations indicated that the gene extended over 2.8 kb, proceeding toward the start of the beta-galactosidase gene. Taking advantage of a unique PstI site at 1.7 kb, we subcloned PstI-EcoRI fragments in both orientations into M13 vectors, then generated and sequenced 48 deletion mutants. In the 3974-base insert, an open reading frame, beginning at nucleotide 24 and terminating at 2825, was found to encode a 933-amino acid polypeptide having a calculated molecular mass of 96,758 daltons. The first 20 amino acids exactly match those determined from amino-terminal sequencing, indicating that this protein is secreted without a leader sequence. The deduced amino acid composition matches that of the purified SAP. We identified a ribosomal binding site 9 bases upstream, and a putative transcription terminator (delta G = - **12** .4) 21 bases downstream. There is partial homology of primary and secondary structure with five other bacterial S-layer proteins.

Tags: Comparative Study; Support, Non-U.S. Gov't; Support, U.S. Gov't, Non-P.H.S.; Support, U.S. Gov't, P.H.S.

DIALOG(R)File 155:MEDLINE(R)
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10597838 20289567 PMID: 10836867

Bickerstaff's brainstem encephalitis subsequent to Campylobacter **jejuni enteritis.**

Yuki N; Odaka M; Hirata K

Journal of neurology, neurosurgery, and psychiatry (ENGLAND) May 2000, 68 (5) p680-1, ISSN 0022-3050 Journal Code: JBB

Languages: ENGLISH

Document type: Letter

Record type: Completed

Subfile: INDEX MEDICUS

Tags: Case Report; Human; Male; Support, Non-U.S. Gov't

Descriptors: *Brain Stem--pathology--PA; *Campylobacter Infections --complications--CO; *Encephalitis--microbiology--MI; Adolescence; Campylobacter jejuni--isolation and purification--IP; Campylobacter jejuni --pathogenicity--PY; Encephalitis--etiology--ET; Encephalitis--therapy--TH ; **Immunization , Passive** ; Plasmapheresis

Record Date Created: 20000530

6/9/24 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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10470382 99423683 PMID: 10491405

Monoclonal antibodies raised against Guillain-Barre syndrome-associated Campylobacter **jejuni lipopolysaccharides react with neuronal gangliosides and paralyze muscle-nerve preparations.**

Goodyear CS; O'Hanlon GM; Plomp JJ; Wagner ER; Morrison I; Veitch J; Cochrane L; Bullens RW; Molenaar PC; Conner J; Willison HJ

University Department of Neurology, Southern General Hospital, Glasgow G51 4TF, Scotland.

Journal of clinical investigation (UNITED STATES) Sep 1999, 104 (6) p697-708, ISSN 0021-9738 Journal Code: HS7

Erratum in J Clin Invest 1999 Dec;104(12) 1771

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Subfile: AIM; INDEX MEDICUS

Guillain-Barre syndrome and its variant, Miller-Fisher syndrome, are acute, postinfectious, autoimmune neuropathies that frequently follow Campylobacter jejuni enteritis. The pathogenesis is believed to involve molecular mimicry between sialylated epitopes on C. jejuni LPSs and neural gangliosides. More than 90% of Miller-Fisher syndrome cases have serum anti-GQ1b and anti-GT1a ganglioside antibodies that may also react with other disialylated gangliosides including GD3 and GD1b. Structural studies on LPS from neuropathy-associated C. jejuni strains have revealed GT1a-like and GD3-like core oligosaccharides. To determine whether this structural mimicry results in pathogenic autoantibodies, we immunized mice with GT1a/GD3-like C. jejuni LPS and then cloned mAb's that reacted with both the immunizing LPS and GQ1b/GT1a/GD3 gangliosides. Immunohistology demonstrated antibody binding to ganglioside-rich sites including motor nerve terminals. In ex vivo electrophysiological studies of nerve terminal function, application of antibodies either ex vivo or in vivo via **passive immunization** induced massive quantal release of acetylcholine, followed by neurotransmission block. This effect was complement-dependent and associated with extensive deposits of IgM and C3c at nerve terminals. These data provide strong support for the molecular mimicry hypothesis as a mechanism for the induction of cross-reactive pathogenic anti-ganglioside/LPS antibodies in postinfectious neuropathies.

Tags: Animal; Female; Male; Support, Non-U.S. Gov't

Descriptors: *Antibodies, Monoclonal--immunology--IM; *Campylobacter jejuni--immunology--IM; *Gangliosides--immunology--IM; *Lipopolysaccharides --immunology--IM; *Neuromuscular Junction--physiology--PH; *Polyradiculoneu ropathy--microbiology--MI; Complement 3--physiology--PH; Cross Reactions;

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t      Items    Description
S1      4006    E1-E50
S2      2454    E1-E31
S3     56853    R1-R30
S4         1    "GUILLAIN-BARRE SYNDROME, CAMPYLOBACTER JEJUNI,"
?t s4/9/1
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Genuine sickness

4/9/1 (Item 1 from file: 34)

07291016 Genuine Article#: 147AF Number of References: 36

Title: Campylobacter jejuni bacteremia and Guillain-Barre syndrome in a renal transplant recipient

Author(s): Maccario M (REPRINT) ; Tarantino A; NobileOrazio E; Ponticelli C
Corporate Source: OSPED MAGGIORE,DIV NEPHROL & DIALYSIS, IRCCS, VIA COMMENDA 15/I-20122 MILAN//ITALY/ (REPRINT)

Journal: TRANSPLANT INTERNATIONAL, 1998, V11, N6 (NOV), P439-442
ISSN: 0934-0874 Publication date: 19981100
Publisher: SPRINGER VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010
Language: English Document Type: ARTICLE
Geographic Location: ITALY
Subfile: CC CLIN--Current Contents, Clinical Medicine;
Journal Subject Category: SURGERY; TRANSPLANTATION

Abstract: In patients who have not undergone transplantation, Guillain-Barre syndrome (GBS) is typically preceded by an acute infection often sustained by Campylobacter jejuni. Thus far, in renal transplant recipients, only eight cases of GBS have been reported. In seven patients GBS was attributed to cytomeealovirus infection and in the eighth patient to cyclosporin A neurotoxicity. We report here the case of a GBS in a renal transplant recipient following C.jejuni bacteremia. The infection quickly disappeared after erythromycin and methronidazole therapy. GBS progressively evolved into a paraparesis within week. After reaching a plateau phase, the clinical status improved and the patient was able to walk unassisted after 3 weeks. At his last check-up, 54 months later, the patient was doing well with a functioning graft and only minimal weakness of the lower limbs.

Descriptors--Author Keywords: **Guillain-Barre syndrome**, **Campylobacter jejuni**, **renal transplantation**
Identifiers--KeyWord Plus(R): BONE-MARROW TRANSPLANTATION; CYTOMEGALOVIRUS-INFECTION; ANTI-GM1 ANTIBODIES; POLYNEUROPATHY; ASSOCIATION; NEUROPATHY; ENTERITIS; PATIENT; VIRUS

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